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- CULTURAL RESOURCE OVERVIEW -

MEDICINE BOW NATIONAL FOREST

INCLUDING

THE THUNDER BASIN NATIONAL GRASSLAND

VOLUME I: MEDICINE BOW NATIONAL FOREST

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Forest Service
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Laramie, Wyoming 82070

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March 15, 1981

CULTURAL RESOURCE OVERVIEW OF THE MEDICINE BOW NATIONAL FOREST

Volume I: Medicine Bow National Forest

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ABSTRACT

This overview of cultural resources is presented in two volumes; one for each of the two major administrative units of the Medicine Bow National Forest. The historical overview includes a history of the National Forest as a government agency. This provides a framework to assess historical sites in relation to developments of land use law, policy, and administration. An ethnohistorical synthesis provides a perspective on historic Native American use of the region. The prehistoric assessment includes the examination of the relationship between site distributions and the environment resource inventory being used by the Forest Service for the National Forest and the National Grassland. A physiographic analysis delineates the current ecological situation, provides a paleoenvironmental reconstruction and integrates ecological with cultural resource data. A set of map overlays is included with the reports. submitted material should be considered working documents by which the Forest Service can regularly update its data bank and refine the procedures of which it evaluates and manages the resources under its jurisdiction.

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ACKNOWLEDGEMENTS

These cultural resource overviews of the Medicine Bow National Forest and the Thunder Basin National Grassland were prepared during a period of rapid transition. The scope of work and subsequent contract were initiated while the authors were working for Archeological Services (John Greer, Director). The Notice to Proceed was issued on August 10, 1981. On August 29th, Archeological Services was formally ended, although the contractual obligations remained with John Greer. The original project personnel then became a part of a new firm, High Plains Consultants (HPC), on September 15, 1981. Little research on the project was accomplished during that transitional 30 day period, although there was little doubt by the project staff that work on the project would continue. Discussions were held with John Greer and HPC managers regarding the disposition of contractual responsibilities. It was unclear to Mr. Greer or HPC as to what proper contractual and other legal matters needed to be accomplished to insure full compliance with the terms of the contract. He encouraged the original project staff to complete the project while he and HPC arranged the proper legal paperwork. While Mr. Greer and the Principal Investigator were trying to clear the way contractually, the HPC staff organized as a team with a renewed commitment to produce a quality overview under the auspices of the new company.

Several persons in the Forest Service have eased this transition and assisted the authors in accomplishing the goals of the project. Gerald Meyer, the Contracting Officer, offered extensive information and advice on government procedures and the variety of alternatives for changing contracts. Several people at the offices of the Medicine Bow National Forest provided the staff with technical advice and access to files and documents, particularly Patti Roylance and Marie Crisostomo. Matt Wolhberg, Richard Cerise, Paul McKillip and Terry Hoffman were interviewed and freely shared the benefit of their knowledge of the history of the Forest and its districts. A unique contribution of this project to cultural resource studies is the use of a computer data bank of the Forest Service. Chris Marvel and Jim Field were important contributors in the development of an effective coding system and in arranging for the use of a remote terminal. Art Leys gave us his time, suggestions, and counsel regarding Forest Service expectations. The efforts and contributions of these Forest Service personnel are appreciated.

The project required extensive library and archival review. Of particular usefulness were the resources of the American Heritage Center at the University of Wyoming. Two specialists at the Center provided key assistance in locating and retrieving sources: Emmett D. Chisum and Paula McDougal. It should be emphasized that this was an HPC team effort involving a dedicated group of senior authors and ancillary professionals who were available at short notice to accomplish a constellation of research tasks, administrative chores and technical details. Andrea LeVasseur and Chris Cojeen did some of the initial review of map overlays. Becky Walker, Jayne Adams and Alice

Bronsdon were involved in a variety of review, editing and administrative tasks. Peggy Baker and Joyce Evans reviewed all maps and produced a set of overlays on which the Forest Service can keep track of future resource projects.

Reports such as these necessarily evolve through several critical reviews and drafts. The editorial quality of these overviews can be attributed to the work of two archeologists whose names do not appear as authors, yet who have made significant contributions to the success of the project. JoDee Eckles was the technical editor for all drafts, did much of the word processing, and tightly monitored the clear and concise exposition of the text. Fred Chapman reviewed the entire manuscript for accuracy, continuity, and compliance with the scope of work. JoDee and Fred were key quality control persons for the project.

The authors of these two overviews worked within a narrow constraint of time. They worked with commitment and determination to produce a thorough coverage of an extensive body of information pertaining to two large portions of Wyoming. The authors put in many long hours to complete tasks in concert with the rest of the team. Their diligence and perseverance was much more than expected. I am proud of and impressed with their accomplishment.

Dr. Peter S. Miller Principal Investigator March 15, 1982

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INTRODUCTION AND EXECUTIVE SUMMARY

This is an overview of the cultural resources on United States Government land controlled by the Department of Agriculture, Forest Service, Medicine Bow National Forest. It includes the Thunder Basin National Grassland. The overview is separated into two volumes, one for each of the two major administrative units. The objective is to summarize, compile, and bring up-to-date all of the previously recorded cultural resource information. The information is then to be analyzed and assessed as to distribution, significance, and interpretive value. The documents, maps, overlays and printouts submitted are intended as management tools by which the Forest Service can fulfill its legal obligations under 36 CFR Part 219 and other mandated legislation and directives.

This is the first overview of both regions that is comprehensive in its scope and coverage. Earlier overviews of the Medicine Bow National Forest have either been restricted to Class I studies of timber sale locales or have not reviewed both historic and prehistoric resources. There have been no major overviews of the Thunder Basin National Grassland, although there have been an extensive series of recent cultural resource studies that integrate file searches and Class I overviews into intensive surveys of block areas within the National Grassland. The need for a comprehensive overview of the Grassland is clear, given the current and projected development of the region for oil, gas, pipelines, transportation systems, and particularly, coal mines. The social-scientific and historic knowledge of the Grassland is less extensive than that of the Medicine Bow National Forest. This overview of the National Grassland had to rely on fewer reviews and more basic compiliation of resource data than was necessary for the Medicine Bow National Forest. Because of the varying scope of coverage of information pertaining to the two areas, there has been two distinctive but related approaches in preparing the two overviews.

1. Medicine Bow National Forest: A management need for these forested areas is to improve the methods by which historical resources can be evaluated. Early reports on the cultural resources of the Forest gave little emphasis to historical properties. The recent overview of portions of the Forest by Fawcett and Francis (1981) provides a general discussion of three kinds of historic sites: 1) mining-related, 2) lumber and tie industry, and 3) pastoral locales. Of particular value is their extensive bibliography, arranged by subject.

Robert and Elizabeth Rosenberg, the historians for this project, have reviewed the existing literature on the historic resources of the Forest. In order to evaluate the relative significance of these resources, a perspective was developed that would tie historic resources to the historical development of the National Forest. It is assumed that historic uses of

the Forest lands are closely related to the land management rules, practices and administrative actions implemented by Forest supervisors at the various Forest facilities. This will be the only recent history of the Medicine Bow National Forest as a public agency. Historical events within the Forest can now be associated with the overall changes and developments of the administration of the Forest lands.

- Thunder Basin National Grassland: This will be the first overall synthesis of cultural resources for this major energy development region. An extensive series of land alterations are planned that may adversely affect significant cultural resources. Until recently, the significance of any particular resource was evaluated either on its own merit or within a local archeological district. There has been no syntheses of the resources in relationship to physiographic and other ecological dynamics. One reason for the lack of comprehensive overviews of the Grassland is that the U.S. Geological Survey does not have available seven and one-half inch scale maps of the entire region. The Forest Service does have the region delineated by major ecological systems. However, the cultural resources have not been placed in time and space within the Grassland in relation to the ecological classification system. This overview involved the coding of cultural resource data so as to be compatible with the automatic data processing and analysis sytem of the Forest Service at the Fort Collins computer center. Relationships can be established between site distributions and ecological variables. tions can be asked concerning kinds of sites and their distribution within the various ecological zones of the Grassland. Although there are other preliminary predictive models based for the Thunder Basin, this overview provides a means for statistical models based on region-wide considerations. It will allow for the evaluation of the significance of sites on a regional basis. The results should be a reduction in archeological data redundancy, fewer sites being declared eligible for the National Register of Historic Places, a reduction in the time and money needed to spend on cultural resource studies, and - most important more efficient and effective management of the valuable resources of the National Grassland. An evaluation of previous predictive models and a new preliminary model using the Forest Service Univac 1100 computer is included in Volume II. The model is currently undergoing refinements which can be made available at a later date.
 - 3. Ethnohistorical Perspective: This will be the first overview of the Medicine Bow National Forest that attempts to reconstruct the history of the American Indian groups in eastern Wyoming in terms of their association with the two public land areas. Stephen Lau has provided a refined perspective so that sites can be evaluated in terms of the values and attitudes of the native Americans rather that the restricted viewpoints of military expeditions and westward expansion into Indian occupied lands.
 - 4. Physiography: The ecological dynamics of the mountains and the grasslands administered by the Medicine Bow National Forest are discussed from three aspects: general physiographic (ecological) description; overview of ecological changes through time (paleoenvironmental reconstruction); and the relationship between ecological conditions and

the location of cultural resources. This aspect of the overview was prepared by Dennis Grasso, staff geomorphologist.

No overview can be the final word on the cultural resources of a region. We cannot give assurances that all recorded resources have been properly and adequately considered. Just as there are data gaps where we cannot adequately assess the resource potential of a sub-region, so will there be weaknesses in the framework by which we have evaluated what is known. This a working document, meant to be improved and revised as more data are accumulated and resource specialists assess the information from a broad regional perspective, within the current state of the art of cultural resource studies.

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PHYSIOGRAPHY OF THE MEDICINE BOW NATIONAL FOREST

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BY

Dennis Grasso

PHYSIOGRAPHY
OF
THE MEDICINE BOW
NATIONAL FOREST

INTRODUCTION

The Medicine Bow National Forest includes four major areas considered in this overview. These are: the Medicine Bow Mountains, including the popular Snowy Range Summit, the Sierra Madre, formerly the Hayden National Forest, the Laramie Peak District and Pole Mountain Unit of the Laramie Mountains, and the Thunder Basin National Grassland. The Medicine Bow Mountains were first established as a National Forest in 1902 by President Theodore Roosevelt. Since then other portions were added until 1954 when the latest portion, the Thunder Basin National Grassland, was placed under its jurisdiction. Medicine Bow Mountains and Sierra Madre encompass the largest land area in the southeastern Wyoming portion of the National Forest, while the Thunder Basin National Grassland occupies the largest northeastern Wyoming portion. Due to dissimilarities in their physical character a distinction will be made that separates these two portions of the National Forest. The southeastern Wyoming portion will therefore include all mountainous regions of the National Forest, and the northeast Wyoming portion will collectively include the National Grassland. To simplify discussion, the paleoenvironmental history for each region will be presented following an in-depth description of each region's unique physical and biological characteristics. The paleoenvironmental history can then be correlated with known cultural activities and population dynamics throughout the region.

PHYSIOGRAPHIC DEVELOPMENT

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The Medicine Bow National Forest comprises the greater Wyoming portion of three north-south trending mountain ranges of the Middle Rocky Mountain Physiographic Province. The region consists of mountains extending north from major ranges in Colorado separated by two large intervening, flat-floored valleys, namely Saratoga Valley and Laramie Basin. The Medicine Bow and Laramie Mountains are northern extensions of the Colorado Front Range, separating near Cameron Pass in north central Colorado, while the Sierra Madre is a northward extension of the Colorado Park Range. Elevation averages 7000 to 8000 ft. The highest peak, Medicine Bow Peak, has an elevation of 12,013 ft; a number of other peaks exceed the 10,000 foot level. Regional drainage is through the North Platte River in Saratoga Valley and the Big and Little Laramie Rivers in the Laramie Basin, both major tributaries of the Upper Missouri River Drainage (Figure 1).

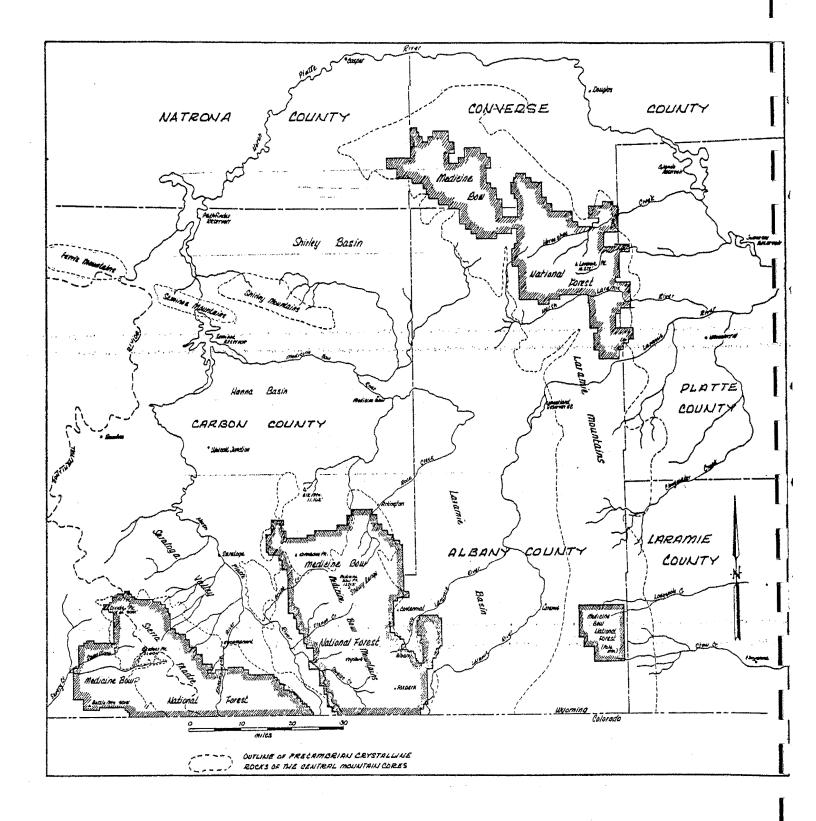
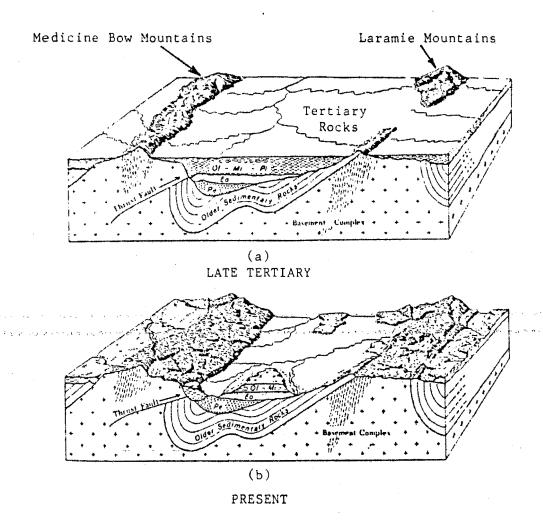


Figure 1. Location map of the Medicine Bow National Forest showing extent of mountain ranges and major drainage networks in southeastern Wyoming.

Regional topography is the product of early tectonic mountain building events and late Cenozoic erosion. East-west directional compression of the earth's crust caused complex folding of sediments and uplift of crystalline basement rocks along major fracture zones from New Mexico to Canada (Figure 2). Older Precambrian crystalline rocks are now exposed at the surface adjacent to younger, folded and faulted Paleozoic and Mesozoic marine sedimentary rocks (Graff 1978). Widespread crustal stress developed throughout the Rocky Mountains during this regional mountain building episode known as the "Laramide Orogeny" (Knight 1953). Orogenic events of this major geotectonic cycle lasted some 60 million years and culminated by late Paleocene to early Eocene time, some 40 million years ago (Blackstone 1975; Moore 1960).

Massive exposures of resistant Precambrian quartzite, granite, schist, and gneiss form exposed central mountain cores today. These and crystalline cores of adjoining ranges to the south may be segments of a single intrusive igneous block that was emplaced prior to uplift. Separate ranges would therefore be expressions of this block. The Mullen Creek-Nash Fork Shear Zone, a major fracture zone in this block, is known to trend generally eastwest through the Sierra Madre and Medicine Bow Mountains, and is believed to continue across the Laramie Basin into the Laramie Mountains (Graff 1978) (Figure 3). This shear zone is well expressed in the Medicine Bow Mountains where it is found to have juxtaposed rocks of different lithology and age (Figure 4a), truncated structures, and disrupted original stratigraphic sequences (Figure 4b). Shear zones and other crustal fractures in the Rocky Mountains, such as thrust faults (Figure 2) and normal faults, are associated with Laramide orogenic events and have helped geologists to develop hypotheses for the physiographic origin of the Rocky Mountain Region.

Metamorphozed sedimentary and volcanic rocks occur throughout the ranges together with veins containing gold and silver bearing minerals and copper mineralized deposits containing copper. In the Medicine Bow Mountains primary copper, gold, and silver bearing deposits occur in Precambrian and younger igneous rocks. Silver and gold fragments also occur in deposits of Quaternary stream gravels (placer deposits). Placer deposits have been heavily mined along Douglas Creek, for example, in the Keystone Mining District. Currey (1959) states that an estimated \$227,000 in gold has been produced from submarginal mines and placers of the Keystone area. Some of these placerbearing gravel deposits ranged from 3 to 10 ft thick and contained large nuggets of gold with quartz still attached, indicating nearness to source area. The gold deposits were generally concentrated near bedrock but also occurred throughout the deposits as coarse angular fragments to very fine, flour-like particles. Mineral-bearing crystalline rocks in the Sierra Madre were first studied during the Hague Expedition of the Fortieth Parallel Exploration in 1877. Attempts at development from 1872 were unsuccessful until 1898 when gold was found at Purgatory Gulch and copper was first mined at the Ferris-Haggerty Mine. Research on the geologic and economic importance of these rocks has been conducted by Spencer (1904), Short (1958), Currey (1959), Coalson (1972), Schuster (1972), and others. The interested reader is referred to their works as well as reports by Hills et al. (1968), Houston and Parker (1963), Hills and Armstrong (1974), and Karlstrom (1977) for additional information on Precambrian rocks and the tectonic developments of the region.



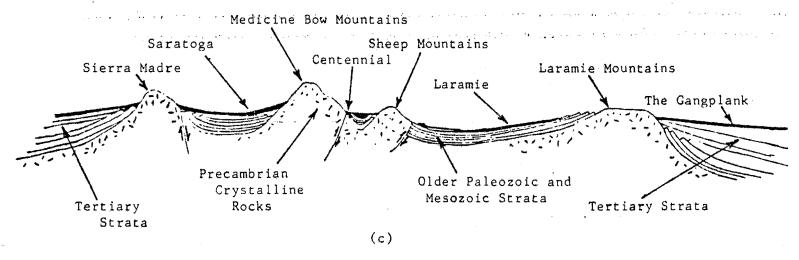


Figure 2. (a) Schematic illustration of the relative structural and stratigraphic character of mountains and intervening valleys during late Tertiary (note thrust faulting and complex folding of older sedimentary rocks); (b) schematic illustration of current physiographic character after late Cenozoic erosion, Pleistocene glaciation, and basin dissection (Knight 1974); (c) schematic cross-section of the region of the Medicine Bow National Forest.

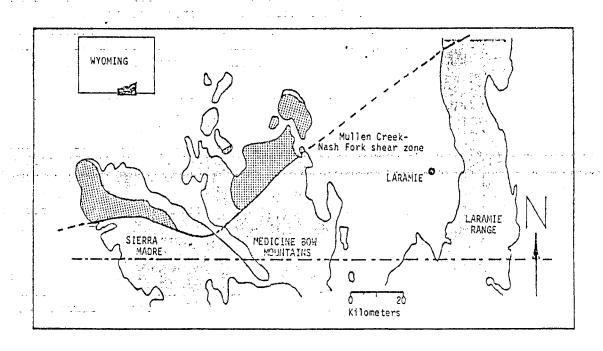
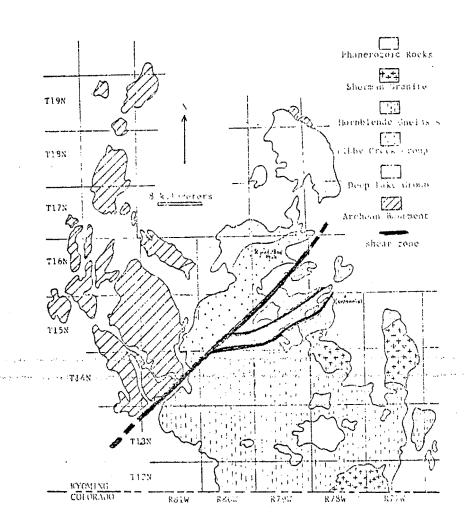
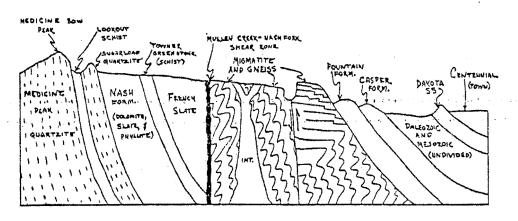


Figure 3. Location of the Mullen Creek - Nash Fork shear zone in southeastern Wyoming separating Precambrian rocks (shaded area) from younger Precambrian (Proterozoic) metasedimentary rocks (stippled area)(Craff 1978:6).





SCHEMATIC DIAGRAM SHOWING STRUCTURE AND MAJOR ROCK TYPES IN THE LIBBY CREEK AREA

Figure 4. General geologic map of the Medicine Bow Mountains showing the location of the Mullen Creek - Nash Fork shear zone and juxta-position of older and younger Precambrian rocks (Karlstrom 1977). Lower diagram is schematic cross-section from Medicine Bow Peak to Centennial (Sansom 1972:17).

Following major mountain building events late in the developmental history of southeastern Wyoming, erosion of mountainous uplands supplied sediment that formed depositional surfaces in adjacent valleys. East of the Laramie Mountains and west of the Sierra Madre, for example, late Tertiary sediment covered extensive paleo-surfaces formed on Paleozoic and Mesozoic bedrock, some of which dipped rather steeply away from the mountains at 10 to 40 degrees (Figure 2b and 2c). West of the Sierra Madre, Ritzma (1949) found that early Tertiary rocks of the basal conglomerate member of the Brown's Park Formation are of the same lithology as those currently exosed in the central part of the range. This would indicate that Precambrian rocks of the mountain core were exposed by erosion during early Miocene (25 million years ago).

East of the Laramie Range, Tertiary rocks also extend over steeperdipping, older sedimentary rocks onto the Great Plains (Figure 2). Their gentle dip (1 to 2 degrees) indicates that tectonic uplift of the range had culminated prior to their deposition in early Miocene. This area near Vedauwoo is geologically important, since in no other locality east of the Rocky Mountains do Tertiary sedimentary rocks extend from the mountains to the Great Plains. Elsewhere, erosion has removed important Tertiary stratigraphic sequences. The stratigraphic and tectonic characteristics of this area have enabled geologists to establish models of the physiographic development of the Front Range (see Chamberlain 1919; Moore 1959; Van Tuyl and Lovering 1933; Wahlstom 1947). The ramp-like depositional surface, known as the "Gangplank", is also of historical significance since it provided an easy access route for the Union Pacific Railroad to cross the Rocky Mountains.

Late Tertiary erosion and Ouaternary glaciation exhumed mountainous uplands and dissected older sedimentary formations. Erosion throughout Tertiary stripped 10,000 ft of sedimentary rocks and 5000 ft of Precambrian crystalline rocks from the ranges. More resistant rocks remain as peaks and ridges, such as the quartzite peaks of the Snowy Range (Knight 1953). Likewise, resistant granodiorite inselbergs and tors give Vedauwoo its unique physical character (Cunningham 1969; Moore 1959). Figure 2b and 2c depict the present topographic character of the region and schematically illustrate its general structure and stratigraphy.

By late Cenozoic, Ouaternary climatic events developed unique glacial landforms and other geomorphic features that will be described in detail in this report. Major events have been reconstructed from evidence revealed by landforms, soils, and paleobotanical data. The occurrence of these events in many ways governed cultural subsistence patterns and migration.

The physiographic history of the region is summarized as follows:

- Regional uplift and erosional dissection of sediments from mountainous uplands exposing Precambrian crystalline cores.
- 2) Deposition of extensive late Tertiary surfaces along foothills surrounding uplands.

- 3) Quaternary glaciation forming glacial landforms and continued erosion exhuming mountain cores and valleys.
- 4) Deep erosional valleys and step-like terraced landforms remain as evidence of the cyclicity of climatic events of late Quaternary.

ENVIRONMENTAL SETTING

Environmental conditions in mountainous regions of the Medicine Bow National Forest are quite diverse. Higher elevations are subject to extremes in climate that cause rapid freezing and thawing of surface sediment, erosion of rocky outcrops and disruption to soils. Commonly, only dwarf species of shrub and low herbaceous plants can persist. Intense frost action produces hummocky surfaces having only weakly formed soils. The mechanical disintegration of higher peaks supplies debris to boulder fields, talus slopes, and other rubble accumulations, such as those that develop along the east face of the Snowy Range in the vicinity of Lake Marie. At lower elevations, pine and spruce/fir forests contain thick understory vegetation and accumulate abundant organic litter. These accumulations are important since they reduce runoff protecting the soil from erosion and create an ideal infiltration surface supplying moisture to the soil. Soils developed here are commonly rich and deeply weathered. Along foothills, rolling grass and sage-covered surfaces having grassland soils form on stable, older geomorphic landforms. Steep slopes and river valley sides are prone to erosion and mass wasting and are generally poor ecozones for soil development and preservation of cultural materials. Certain landforms may have provided more suitable campsites for early cultures and may have been stable enough to preserve archeological remains.

Climate

Climatic conditions are governed by topography, elevaton, and geographic location relative to atmospheric circulation. In winter, frigid Artic cold fronts sweep southward from Canada causing temperatures to plunge and bring snow to the region. In summer, hot dry air commonly fills basins having a moderating influence on the local weather. Higher elevations and exposed locations with less vegetation cover loose heat rapidly due to radiation cooling to the atmosphere at night. Thus, days tend to be warm and nights cold. Localities east of mountains receive beneficial affects from downslope air drainage and from protection in the rain shadow of mountains. Descending westerlies (Chinook winds) warm at a rate of 5.5° F per 1000 ft elevation so that by the time they reach valleys 3000 to 4000 ft below they have warmed nearly 20° F.

The passage of major storm systems creates dynamic and diverse weather patterns. The orographic influence of mountains tends to produce higher amounts of precipitation and low temperatures. Mountains receive more precipitation in the form of winter snow, from 100 to 200 inches annually. In places

along the Medicine Bow Mountains, more than 200 inches of snowfall is received annually, equalled only by areas in the Bighorn Mountains and along the Absaroka Plateau near Yellowstone National Park (Brown 1970). In comparison, surrounding lower elevations receive only 40 to 60 inches annually. The lower grasslands however, receive more precipitation in the form of spring snow and summer rain that accompany thunderstorms and supply needed moisture to grassland species.

Laramie and Saratoga, having similar climates, receive 11 and 9 inches precipitation, respectively. Both have a mean annual temperature of 42° F. Centennial, at the base of the Medicine Bow Mountains, and Foxpark, in the southern part of the mountains, receive more precipitation (16 inches annually) and have lower mean annual temperatures (40° and 34° F., respectively) than surrounding lower valleys. Figure 5a and 5b illustrate these variations and demonstrate the affects of physiographic location on yearly precipitation distributions.

Climatic data compiled at temporary weather stations in the Medicine Bow Mountains provide a comparison of mountain weather with that of lower elevations. Figure 6a and 6b illustrate variations as they are controlled by physiographic diversity. Note the dominant influence of elevation, both on total amount of precipitation received and mean air temperature. The pattern for June 1969 clearly demonstrates lower temperatures and higher amounts of precipitation with increased elevation. Complete annual weather data compiled at the S.H. Knight Science Camp at 10,000 feet elevation shows a mean annual temperature of 29.6° F. and an annual precipitation of 33 inches.

VEGETATION ZONES

Vegetation zonation is related to variations in elevation, topography, slope aspect, climate, and soils. In the Medicine Bow Mountains vegetation zones occur in certain locations determined in greater part by current climatic conditions. Some species are limited to a single zone based on their tolerance to variations in environmental parameters, while others can transcend zone boundaries. In general, there is a recognizable vegetation stratification and grouping of species from the higher mountain elevations to the lower basins and foothills. Porter (1962) developed a simplified model of vegetation zonation for Wyoming based on six major vegetation zones. Three zones represent the vegetation of the Medicine Bow National Forest. These are described below and presented along with major species in Table I.

Alpine Vegetation Zone

This zone extends from timberline to higher mountain crests. It consists of alpine tundra, rocky summits, boulder fields, glacial lakes, meadows, perennial stream channels and, in places, permanent snow fields. The vegetation shrubs.

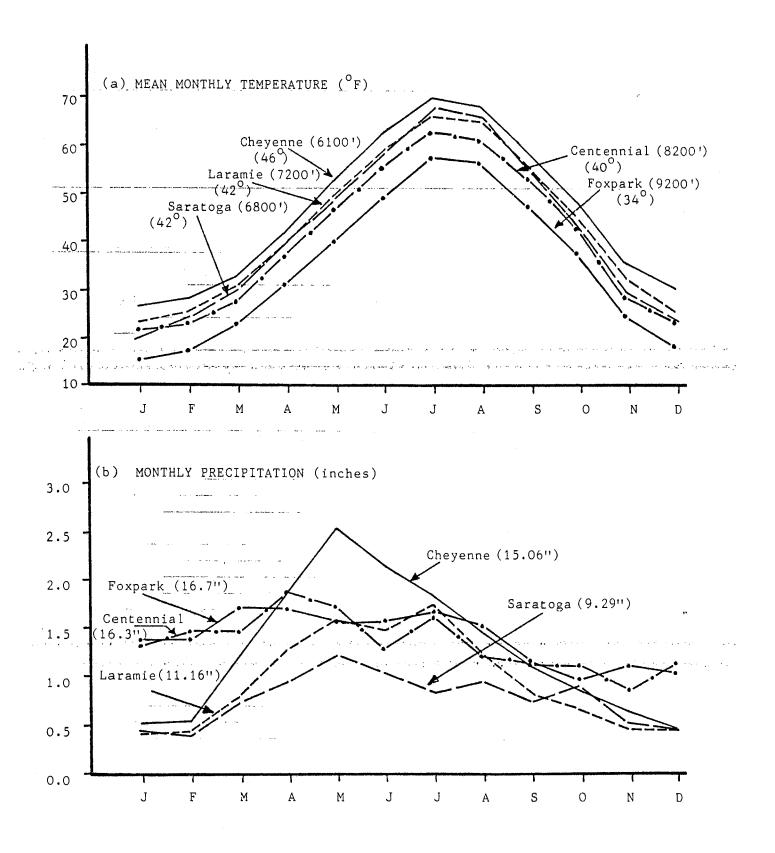


Figure 5. Mean monthly temperature (a) and monthly precipitation (b) of five selected towns adjacent to mountains of the Medicine Bow National Forest. Elevation (in feet), mean annual temperature (in degrees Farenheit), and annual precipitation (in inches) follows town names. Period of record 1931-1964 (after Becker and Alyea 1964)

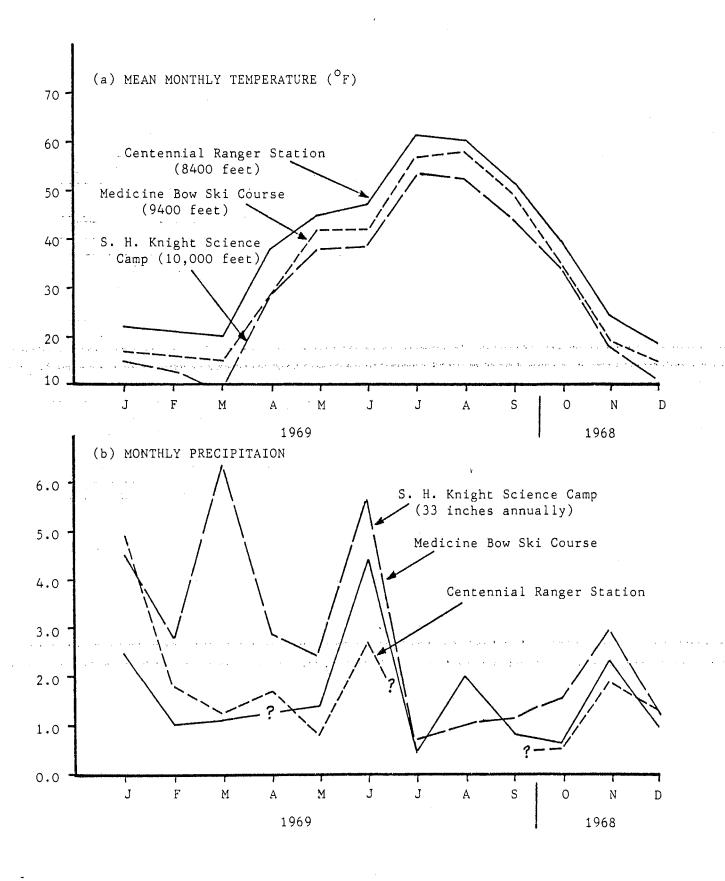


Figure 6. Mean monthly temperature (a) and mean monthly precipitation (b) at temporary weather stations in the Medicine Bow Mountains for the period October 1968 to September 1969 (Wyoming Water Resources Research Institute, 1970).

TABLE I

Major Vegetation Zones and Representative Species of the Medicine Bow National Forest

Alpine Vegetation Zone (>10,500 ft elevation)

Common Juniper - Juniperous Communis
Willow - Salix spp.
Cinquefoil - Potentilla Fruticosa
Sedge - Kobresia spp.
Cushion plants - (Silene Acaulis, Phlox Pulvinata, etc.)
Flowered plants - (Caltha Leptosepala, Trollius Laxus, etc.)

Timbered Mountain Slope Vegetation Zone (approximately 8000 to 10,000 ft elevation, highly variable)

Engelmann Spruce - Picea Engelmanni Subalpine Fir - Abies Lasiocarpa Huckleberry - Vaccinium Scoparuim Lodgepole Pine - Pinus Contorta Sagebrush - Artemisia Tridentata Ponderosa Pine - Pinus Ponderosa Douglas Fir - Pseudotsuga Menziesii Limber Pine - Pinus Flexilis Apsen - Populus Tremuloides

Foothills Vegetation Zone (below 8000 ft elevation, variable)

Sagebrush - Artemisia Tridentata
Juniper - Juniperus Scopulorum
Cottonwood - Populus Angustifolia
Willow - Salix spp.
Roses - Rosa spp.
Dogwood - Cornus Stolonifera

Grasses:

Blue gramma - Bouteloua Gracilia
Buffalograss - Buchloe Dactyloides
Junegrass - Koeleria Cristata
Needlegrass - Stippa spp.
Rabbitbrush - Chrysothamnus spp.

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Timbered Mountain Slope Vegetaton Zone

This zone extends from the flanks of mountains to timberline. Trees are conifer and aspen. Meadow parks, and large streams and lakes with associated aquatic plants are characteristic. Three major divisions of this zone are:

- 1. Spruce/Fir Forest at upper elevations consisting chiefly of Englemann Spruce and Subalpine Fir.
- 2. Lodgepole Pine Forest occupying the middle, most conspicuous part of the dense forested mountain slopes.
- 3. <u>Pine/Douglas Fir Forest</u> extending down along the lower elevations to the open foothills.

Foothill Vegetation Zone

This zone occurrs along the lower slopes of mountains and consisting of grasses, smaller trees, and shrubs. Sagebrush is characteristic and often a dominant element where there is good soil and adequate moisture. Along major stream valleys, a streamside forest or scattered cottonwoods, willows, or roses and dogwood shrubs may occur.

Another more complex model of vegetation zonation has been developed in an evaluation of vegetation response to climate and soil along a vertical transect on Elk Mountain (north end of the Medicine Bow Mountains) (Gartner 1967). Gartner (1967) identified four major zones: sagebrush/grassland reaching to 7900 ft elevation, foothills scrub consisting of big sage, true mountain mahogany, and various berries, herbaceous species and grasses from 7900 to 8200 ft elevation, a lower conifer zone consisting of Douglas Fir, lodgepole, limber and Ponderosa pine from 8300 to 9600 ft elevations, and an upper conifer zone consisting of subalpine fir and Englemann Spruce above 9400 ft elevation.

In a very detailed study of vegetation response to physiographic conditions along the Savage Run Creek Watershed, Romme (1977) developed a number of specific vegetation zones. However, he separated and grouped species critically to enable a thorough evaluation of vegetation response to climate, topography, moisture, and slope aspect. Fourteen zones were developed. Their distribution relative to physiographic variations are illustrated in Figure 7. It is noteworthy to point out that while some species develop on only certain slope aspects throughout a range of elevations, such as Mesic Aspen or Douglas Fir Forests, others occur at only certain elevations but on a variety of slope aspects, such as Pine-Aspen Forests.

In a comprehensive systematic treatment of vascular plants of the Medicine Bow National Forest, Nelson (1978) describes 71 families and 283 genera. Through his research and field work, he has provided descriptions of habitat, abundance, and distributions of 781 vascular species in the Medicine Bow Mountains. Specimens currently are cataloged and kept in the Rocky Mountain Herbarium at the University of Wyoming. The interested reader is referred to his work for detailed description of vegetation of the Medicine Bow National Forest.

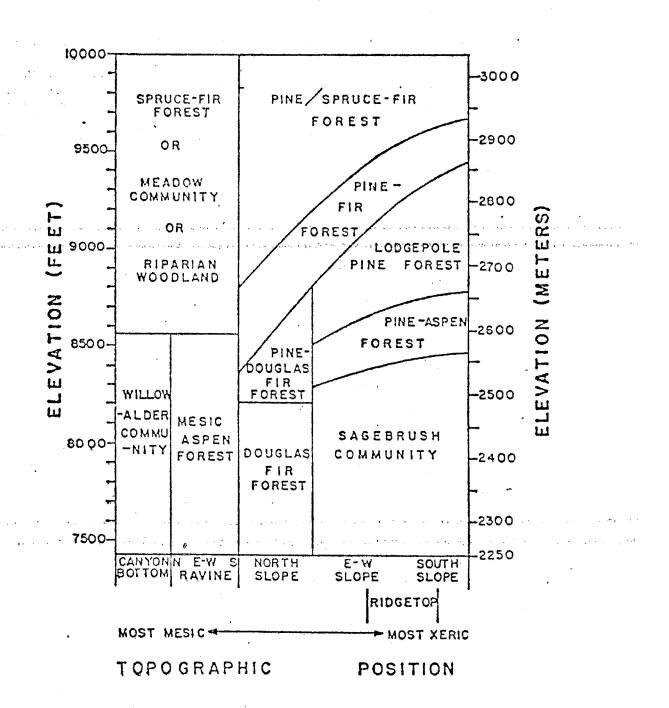


Figure 7. Distribution of plant communities in relation to elevation and topography in the Savage Run Watershed, Medicine Bow Mountains (Romme 1977:85).

Soils in the Medicine Bow National Forest form through the combined influence of past and present environmental conditions portray a wide range of pedologic properties governed by physiographic diversity. Climatic change during late Quaternary glacial and interglacial episodes together with continued disruption due to erosion and deposition, freezing and thawing, and vegetation zone migrations have played a key role in development of distinct soil characteristics. A number of comprehensive soil studies have been conducted that attempt to describe many of these properties and variations. Studies, such as Gartner (1967), Smith (1969), and Reider et al. (1974) offer an analytical view which evaluates soil properties as they are related to various local and regional ecological phenomena. Other field research studies on soils in the Medicine Bow Mountains furnish comparisons of specific pedogenic features that emphasize ecological variations resulting from climatic change and age of soil materials (Sansom 1972; Sansom and Reider 1974; and Reider 1977). The pedogenic time factor (i.e., the relative age of soils) has helped to establish much of the relative chronology of late Quaternary climatic events of the Medicine Bow Mountains and Sierra Madre. It is "this genetic emphasis (that) yields fuller understanding of the geomorphic, climatic, topographic, vegetational, and time factors under which soil formation occurs and as it relates regionally to...soil forming conditions" (Reider An understanding of these genetic soil properties and Gurley 1975:41). helps in establishing predictive cultural sensitivity models and in the reconstruction of paleoclimatic conditions. Through an understanding of the geomorphic and climatic significance of a particular ecozone, both past and present, it is possible to relate cultural resource sensitivity, and the potential for soils of a particular geomorphic surface to contain buried artifacts.

In general, soils of the Medicine Bow National Forest are classified as "soils formed in cold climates of mountains and (upland) valleys" (Young and Singleton 1977). In the Snowy Range and other high Rocky Mountain summit localities, rolling to very steep slopes contain weakly developed soils that are formed on residuum and transported igneous rock debris. The soils are classified as "Rock outcrop--Cryoboralfs--Cryoborolls--Cryorthents Association" by Young and Singleton (1977); the prefix "cryo" indicates soils of very cold climates. In profile, they consist generally of an organic surface horizon, especially under forest conditions where abundant decomposing organic litter develops thick 0 and A horizons, over a mineral depleted (leached) horizon at shallow depths (the A2 horizon in forests), over a horizon of accumulated clays and/or iron mineral concentrations at depth. Vegetation is commonly forest and herbaceous plants and shrubs. These soils are for the most part developed on residuum (weathered bedrock) or other clastic deposits of late Quaternary age and are therefore, relatively young soils. Very young soils are formed on Holocene deposits nearer the summits, while older soils persist on remnants of early Pleistocene glacial landforms and other old, stable surfaces (Oviatt 1977; Reider and Gurley 1975). Soils of the Laramie Mountains are similar, but vary enough to warrant different classification. Young and Singleton (1977) classify these as "Argiborolls--They are formed on residuum accumulations of Haploborolls Association". weathered igneous and sedimentary rocks where vegetation cover is sparse.

Generally, grasses and shrubs persist across these surfaces. Small forest stands form in ecological niches that may be quite extensive in favorable localities. Some soils form on Holocene geomorphic deposits, and small landforms, but most are on older, more stable land surfaces. The thickness of residuum ranges from a very thin veneer over bedrock in easily eroded locations, such as along rocky outcrops near Vedauwoo, to thick weathered profiles in low, more protected locations. Thin residual deposits indicate continued erosion through time and characteristically do not contain buried cultural materials. Older, stable landforms containing thick soil profiles, on the other hand, may be more suitable for preservation of cultural resources.

PALEOENVIRONMENTAL HISTORY

The mountains of the Medicine Bow National Forest offer a wealth of geomorphic evidence helpful in evaluating the impact of late Quaternary climatic change on both the physical and cultural environments. Evidence of repeated glacial episodes abounds in the Sierra Madre and Medicine Bow Mountains. Alpine cirques, lateral and terminal moraines, erosional remnants of prior basin levels, together with various rock debris accumulations of periglacial origin testify to past climatic conditions that were very much different from those that exist today.

Investigation of specific physiographic properties of the environment reveals pertinent information about the intensity and duration of late Ouarternary cyclic climatic intervals. Ecological change would have resulted in the disruption of flora and fauna habitat and would have had profound consequences for human subsistence and habitation strategies throughout the cultural prehistory of the Holocene period.

Pleistocene Climatic Change

During middle to late Pleistocene, climate deteriorated to a colder/wetter period which resulted in development of an extensive ice cap at the summit of the Medicine Bow Mountains that all but engulfed the highest peaks of the Snowy Range. Alpine glaciers spread radially away from the Libby Flats Ice Cap engulfing larger valleys, such as French Creek, Libby Creek, and Rock Creek. Likewise, large cirque basins elsewhere accumulated glacier ice along higher Rocky Mountain peaks. Ice spread from cirques along Bridger Peak in the Sierra Madre and extended 3.0 miles (4.5 km) down Cow Creek Valley toward Saratoga Valley (Price 1973). Glacier ice scoured and excavated valleys into U-shaped profiles. At the terminus of glaciers, large moraines were deposited that ultimately have come to indicate the maximum extent of glacial advance. In Libby Creek Canyon, the earliest glacier extended past the mouth of the canyon and spread laterally near the town of Centennial (Figure 8). An extensive, grass-covered lobate moraine marks its maximum extent (McCallum 1962). Atwood (1937) noted this morainal complex and suggested that it represent a pre-Wisconsin (late Pleistocene) glacial advance. Later, Ray (1940) mapped maxium advance as Wisconsin I. Elsewhere, such as along French Creek, and Cow Creek in the Sierra Madre, similar large

Figure 8. Schematic illustration of late Quaternary glacial landforms along Libby Creek in the Medicine Bow Mountains. Wisconsin I (WI) indicates the extent of the earliest glacier during Bull Lake time, while the position of Wisconsin II, III, IV (WII,WIII,WIV) moraines demonstrates late Pleistocene glacial limits during Pinedale 1, 2, and 3 respectively (Mears 1953:2).

moraines delimit an early, extensive glaciation. Price (1973) notes that Wisconsin age ice spread from Cow Creek, Middle Lake and Silver Lake cirques in the Sierra Madre and filled Cow Creek Canyon to a depth of more than 200 ft (60 m) near the glacier's terminus. Remnants of a large, right lateral and terminal moraine mark its maximum extent. Richmond (1965), Kiver (1972), Benedict (1973), and others record similar extensive alpine glaciation for this early period (i.e., Wisconsin I or Bull Lake) elsewhere in the Rocky Mountains (Figure 9a).

Later Pleistocene (Pinedale) glaciers were similar alpine advances. Again, an ice cap developed on Libby Flats and cirque glaciers formed throughout the Rocky Mountains. In the Sierra Madre, cirques filled with more than 300 ft of glacier ice during these later glacial periods (Price 1973). Glaciers emanating from cirques along alpine summits flowed down pre-existing valleys but were less extensive. Nested moraines (i.e., moraines one inside the other) are progressively younger up valley and record the extent of repeated maximum advances. At least three glacial climatic episodes occurred throughout the Rocky Mountains (i.e., early, middle and late Pinedale) (Figure 9b) (Richmond 1965). In the Medicine Bow Mountains, moraines of Wisconsin II, III, and IV mark the position of ice advance for these periods (Figure 8).

Holocene Climatic Change

The past 10,000 years of the Holocene climatic history is quite interesting since the character of environmental change can be seen in more minute detail and because these fluctuations had profound influence in governing biological and cultural developments in the region.

Holocene climatic events resulted in small-scale glacial episodes of relatively short duration. Cirque glaciers and perennial ice fields occurred along the sheltered east face of the Snowy Range and were restricted to higher elevations throughout the Rocky Mountains. Some mountains that were previously glaciated, such as the Sierra Madre, were not glaciated again during the Holocene. Only extensive snowfields accumulated (Price 1973). Elsewhere, arcuate debris mounds (protalus ramparts) surrounded smaller, stagnant glaciers on the east face of the Snowy Range. Holocene protalus ramparts and small moraines dam Lake Marie, Mirror and Lookout Lakes and delimit the extent of these late glacial episodes (Oviatt 1978). The freshness of their physical character and lack of well developed soil profiles indicate a youthful age.

CHRONOLOGY AND GEOMORPHIC EVIDENCE OF PALEOENVIRONMENTAL HISTORY

Chronological correlations have been presented for Quaternary climatic periods in the Rocky Mountain Region using physical geomorphic criteria and various age dating techniques. Since the early days when Blackwelder (1915) first described glaciation in the Rocky Mountains, researchers have divided and subdivided his early chronological scheme to accommodate the latest evidence of multiple glaciation. Richmond (1965) correlated climatic periods in the

Years 8P	Climatic Unit	Blackwelder (1915)	Moss (1951)	Richmond (1965)	Kiver (1972)	Benedict (1973)	Antavs (1955)
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4,000 5,000 6,000 7,000	Holocene			Temple "b" Lake "a"	Temple Lake	Triple Lakes Altithermal	Altithermal
8,000 9,000 10,000			Temple Lake			"unnamed possible glaciation	
	Wisconsin	Pinedale	Pinedale	Pinedale 2	Pinedale 4	Satanta Peak	
	WISCONSIN	Bull Lake	Bull Lake	Bull 2 Lake 1			
	Illinoian	· -		Sacagewea Ridge			
	Kansan	Buffalo		Cedar Ridge			
	Nebraskan			Washakie Point		S. J. 20. 20.	

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Figure 9. Summary and correlation of late Quaternary chronologies of the Rocky Mountain Region (a); correlation of glacial chronologies of the Rocky Mountains with those of the midcontinental U.S. and European Alps (b). Approximate age (in years B.P.) as based on absolute criteria are given for both (a) and (b) (Richmond 1965).

Rocky Mountains with those of the European Alps and midcontinental U.S. on the basis of various geomorphic phenomena and soils and developed the absolute chronologies presented in Figure 9b. He places the late stage of Pinedale glaciation from early Holocene (10,000 years B.P.) to the start of the period known as the "climatic optimum" or "Altithermal" (6500 to 4500 The Altithermal (Figure 9a; Antevs 1955) is thought to have years B.P.). been a warm/dry period that resulted in the complete deterioration of glacial ice from the higher elevations and drought at lower elevations in adjacent valleys. Many lakes and drainages dried up and generally inhospitable conditions are said to have prevailed. Other correlations place the Pleistocene/Holocene boundary at 10,000 years B.P. and suggest that Pleistocene glaciers had vanished from the high country altogether. Andrews et al. (1975) studying bog stratigraphy in the San Juan Mountains, noted that basal radiocarbon dates indicate that cirques were ice free by 9000 years B.P., and possibly by 11000 B.P. for south-facing cirques. They also found evidence of a short climatic reversal (a cooler/wetter period) from 8000 to 7000 years B.P. that resulted in a lowering of treelines.

entropy with the second to the management of the second of Researchers suggest at least two Neoglacial climatic periods (i.e., two post-Altithermal glacial episodes) together with a possible early Holocene or very late Pleistocene glacial pulse (Figure 9a). Additionally, Benedict (1973), in a comprehensive study of cirque glaciers in the Colorado Front Range, found evidence of four Holocene glacial episodes separated by two warmer and drier climatic periods when ice melted completely from higher elevations. The earlier and more evident dry period, the Altithermal, occurred from 6500 to 4500 years B.P. and the less intense unnamed "warm period" occurred from 3000 to 2000 years B.P. (Figure 9a). During intervening glacial climates, small cirque glaciers deposited moraines; the oldest moraine being most the extensive. In his analysis of these landforms, Benedict (1973) describes a Santanta Peak glaciation (10,000 years B.P.) that he age-dates as late Wisconsin or Pinedale IV equivalent, an "unnamed" early Holocene glaciation (8000 to 7000 years B.P.), an early Neoglacial (Triple Lakes) glaciation (4500 to 3000 years B.P.), and two late. Neoglacial pulses--the Audubon (1850 to 950 years B.P.), and the historic Arapaho Peak (300 to 100 years B.P.) (Figure 9a). This latest glacial episode, known as "Little Ice Age", is represented by small moraines and protalus ramparts that surrounded large ice fields throughout the higher mountains of the western U.S.

In the Medicine Bow Mountains, a late Wisconsin (Pinedale IV) or early Holocene age (ca. 10,000 years B.P.) moraine dams Lake Marie. A portion of Highway 130 currently cuts through the outer morainal ridge representative of this glacial period. Nearer the Snowy Range, glacial till and protalus ramparts damming Lookout Lake have been dated by lichonometry methods as no younger than 3900 years old (Oviatt 1977). Likewise, two later Neoglacial advances were also age dated. These are named Diaster Peak Outer (older, being deposited no later than 3600 years B.P.) and Diaster Peak Inner (younger, being deposited no later than 3000 years B.P.). Oviatt (1977) correlates these with the two advances of Triple Lakes in the Colorado Front Range (Benedict 1973) and with Temple Lake "a" and "b" of the Wind River Mountains (Richmond 1965) (Figure 9a). No late Neoglacial landforms (i.e., Audobon or Arapaho Peak) were mapped in the Medicine Bow Mountains. As Oviatt (1977:66) notes, "the lack of recognizable Audubon or late

Neoglacial deposits (near the Snowy Range Summit) probably results from the relatively low elevation and eastern and southern exposure of the cirque in contrast to the southern Medicine Bow (Kiver 1968) and Front Range (Benedict 1973) regions." Late Neoglacial episodes in the Medicine Bow National Forest were periods of extensive snow cover and perennial snow packs without development of glaciers. Benedict (1973) suggests that this period was characterized in the Rocky Mountain region by increased snowfall and decreased westerly winds. These conditions would have resulted in less snow accumulation along leeward sides of mountains that prevented development of "wind drift glaciers". This may have been the case along the east face of the Snowy Range (Oviatt 1978).

SUMMARY OF THE HOLOCENE PALEOENVIRONMENTAL HISTORY

Holocene climatic change is well documented throughout the Rocky Mountain region (Benedict 1973, Porter and Denton 1967, Richmond 1963, and others). Glacial and periglacial evidence, pollen data from bog stratigraphy and other physical and paleobotanical information provide a more complete understanding about the intensity and environmental consequences of Holocene climatic events. These paleoclimatic events governed not only the character of the ecosystem but, ultimately, human habitation patterns. Absolute and relative age dates from physical and cultural materials provide a general correlation between human occupation and environmental change.

In the Medicine Bow Mountains abundant physical criteria have been utilized to document environmental change. Pedologists have compared relative soil development on young glacial landforms (Oviatt 1977), obtained radiocarbon dates from soil carbonates believed to have formed during the warmer Altithermal (Reider 1977), compared depositional age and soil morphology of glacial moraines (Sansom 1972), and established ecozone redistributions that resulted from Holocene climatic change (Sansom and Reider 1974). These studies provide information pertaining to the physical character and cultural significance of the paleoenvironment.

Throughout the past 10,000 to 12,000 years of the Holocene, glacial/interglacial fluctuations resulted in a disruption to the environment. Colder/ wetter glacial intervals caused forest zones to shift to lower elevations that encroached on grasslands. Conversely, warmer/drier periods brought on a subsequent increased treeline elevation. Grasslands extended farther upslope during interglacial and changed in composition (see paleoenvironmental history for Thunder Basin National Grassland, Volume II). At the 10,000 ft level in the Medicine Bow Mountains, Reider and Sansom (1974) found evidence of polygenesis in soils (i.e., soils having characteristics of two distinctly different ecosystems, one grassland and the other forest). That these soils persist today is evidence of recent climatic change. Calcified soils developed under grasslands at an elevation that is currently covered by forest. Reider and Sansom (1974) suggest that the grassland extended to this higher elevation during the warmer/drier Altithermal and that following this period a cooler/wetter climate of Neoglaciation brought about the reinvasion of forest to lower elevations. The ecozone fluctuation resulted in the

superposition of forest soil characteristics (podzolization) on grassland soils. This change reflects vertical vegetation zones fluctuations that are attributed to widespread climatic change. Treeline fluctuations in response to climatic change have been noted elsewhere throughout the Rocky Mountain region (Andrew et al. 1975), (Figure 10).

Climatic reversals and shifting ecozones would have affected not only vegetation zones, but also mammal grazing habitat and prehistoric culture's hunting and gathering strategies that were closely linked to their environment. Prehistoric cultures would have been forced to adapt to climatic change. If change were slow, adaptation may have gone unnoticed. Rapid change, however, may have disrupted habitat forcing migration. As Frison (1975:298) notes, man's "successful survival during this period resided mainly in his ability to exploit a wide variety of food resources and to resort to alternative strategies when others failed."

Unfortunately, environmentally governed human response is not fully understood. Major change, that can be seen in the physical environment, may be used to help in development of models representative of cultural resource sensitivity that is correlative with past and present environmental change. Evaluation of the relationship between the physical landscape and cultural resource may supply the needed data for the development these models.

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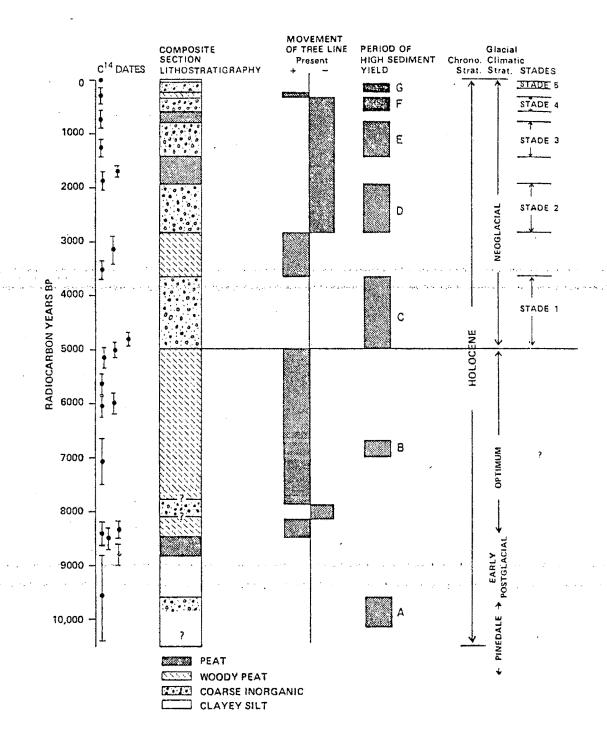


Figure 10. Composite lithostratigraphic model for the northern San Juan Mountains showing distribution of radiocarbon dates, periods of high and low treeline (from macrofossils), periods of high sedimentation, and inferred glacial stades (Andrews et al. 1975: 184).

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THE ETHNOHISTORY AND PREHISTORY OF THE MEDICINE BOW NATIONAL FOREST BY Scott Thybony

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THE ETHNOHISTORY AND PREHISTORY OF THE MEDICINE BOW NATIONAL FOREST

INTRODUCTION

The Mountain Region

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Early descriptions of the Medicine Bow region vary as widely as the moods of the travelers who first saw it. After exploring the Great Basin country, Captain Howard Stansbury headed east and was inspired by the abundance of water and trees he found in the Saratoga Valley.

Day after day, week after week, had we journeyed over that desolate basin, without a tree to be seen in the whole horizon. But now the rustling sound of embowering leaves assured us that we had once more reached a spot fitted by nature for the habitation of man (Stansbury 1852:240).

A few years before, Francis Parkman formed a different impression after reaching the eastern foothills of the Laramie Range.

If a curse had been pronounced upon the land, it could not have worn an aspect more forlorn (Parkman 1849:172).

Being a region of extremes in topography and extremes in climate, the landscape brought out extremes in the way people felt about it. Although the high country of the Medicine Bow National Forest is an extension of the Rocky Mountains, the region is generally considered a part of the Northwestern Plains. The topographic fit may be rough, but culturally there has been a close link with the Plains for a long period of time.

Travel over the mountains of the region has always been limited, but the adjacent basins and plains have provided several important routes. Skirting north of the Medicine Bow and Sierra Madre mountains was a major trail system connecting the Plains to the east with the Great Basin to the west. This eventually became known as the Cherokee Trail and then later the Overland Trail. To the south, the Little Snake River served as an important route into the Green River, Great Basin, and Ute country in northwestern Colorado, while trails crossed the Laramie Plains leading southeast to the base of the Colorado Front Range and major north-south routes. The North Platte River provided access to North, Middle, and South parks, and connected with trails leading further south to the Arkansas and Rio Grande rivers.

While the major focus of the study is the foothill and mountain country within the Medicine Bow National Forest, cultural boundaries don't always follow forest boundaries. When necessary, events from the adjacent intermountain basins are included when they can aid in understanding the cultural patterns of those who are likely to have made use of the Forest in the past.

TIME DEPTH

People have lived in the region for over 11,000 years and there is evidence they have been in the Forest for over 8000 years. But there is also a growing possibility that people were present in the Northwestern Plains much earlier than previously documented. Apparent cultural materials have been excavated at a number of sites that seem to predate the early Clovis Period mammoth hunters (Stanford 1979:147-150).

How continuously man has occupied the mountainous areas of the Medicine Bow National Forest is unknown. There are no excavated sites within the Forest and no clear sequence of occupation. From surface finds alone it is evident that people were using the Forest by late Paleo-Indian times, during portions of the Archaic and Late Prehistoric periods, and into historic times.

By the early 1800's when the first Americans were pushing into the region, the Plains Indians had acquired both horse and gun and had developed the classic culture of the mounted buffalo hunter. In the Historic Period the region was never controlled by a single tribe. Between the Laramie Range on the east and the Sierra Madres to the west, the area was known as disputed country where hunting and raiding parties entered at their own risk (Hafen and Hafen 1956:329; Phillips 1940:35; Bryan 1858:461; Stansbury 1852:244; DeVoto 1947: 224).

Since comparatively little has been written on the ethnohistory of the Medicine Bow region, an emphasis is placed on the mounted, nomadic hunters who dominated the region during the Historic Period. An understanding of certain aspects of their way of life is useful in understanding the potential for cultural resources in the Forest. The discussion of the prehistoric period is focused on the archeology of the mountainous areas of the region, which should have more direct relevance to cultural resource studies in the Forest. A more comprehensive cultural chronology for the Northwestern Plains as a whole is found in the Thunder Basin National Grassland volume.

THE ETHNOHISTORIC PERIOD

The Mounted Hunters

The Northern Arapaho, Northern Cheyenne, and Oglala Sioux were often found in the region during historic times. They were mounted hunters highly dependent on the buffalo and are considered classic Plains Indians. The Eastern Shoshone and the White River Ute, also frequently reported in the area, were mounted hunters but with less dependence on the buffalo. The degree to which they should be considered Plains Indians is an unresolved question (e.g. Oliver 1962; Fox 1976). While there are striking differences among the historic tribes in the region, there are enough similarities in methods of warfare, hunting, and religion to allow a degree of generalization.

Warfare

In September 1850, an exploring party commanded by Captain Howard Stansbury and guided by Jim Bridger crossed the Laramie Plains from the west. As they neared the Laramie River a herd of buffalo scattered through the low hills in front of them, and soon mounted Indians were seen in the distance. Stansbury ordered his men into a grove of cottonwoods where rough breastworks were quickly constructed. Since approaching the Sierra Madre Mountains a week before, the party had been on constant alert for war parties. They had been under orders to sleep with their weapons at night.

The Indians were seen approaching in considerable numbers, but they did not launch an immediate attack. As both sides waited, Bridger shouldered his rifle and walked forward while making signs to the Indians. He was quickly recognized and the Indians began racing into the grove with outstretched hands to shake with everyone they could find.

The Indians turned out to be a village of several hundred Oglala Sioux and some Cheyenne that had left Ft. Laramie to escape an outbreak of small pox. While hunting buffalo in the rich Laramie Plains they had mistaken Stansbury's group for their enemies, the Crow Indians.

Food was soon served to the unexpected guests, as was customary, and a pipe of friendship was passed. Although Bridger did not speak either Sioux or Cheyenne he began telling a story in sign language.

He held the whole circle, for more than an hour, perfectly enchained and evidently most deeply interested in a conversation and narrative, the whole of which was carried on without the utterance of a single word. The simultaneous exclamations of surprise or interest, and the occasional bursts of hearty laughter, showed that the whole party perfectly understood not only the theme, but the minutiae of the pantomime exhibited before them (Stansbury 1852:254).

Although fighting was averted in this case due to Bridger's diplomacy and the fact that the Oglala had recently signed the Treaty of Ft. Laramie, warfare was a common occurrence in the region. Francis Parkman (1849:145),

referring to the western Sioux, said war was "the breath of their nostrils."

The 18th and 19th centuries produced widespread tribal migrations and almost constant warfare. Access to hunting territories was often dependent on military force, while male prestige and wealth in horses was usually linked to success in war. With the acquisition of the horse and gun, new military patterns emerged which caused the old, settled ways of living and growing crops to become a liability (Secoy 1953:89). Many of the Plains tribes had previously been horticulturalists but became nomadic hunters within several generations (Reher 1977:132). A nomadic village was more difficult to raid To increase protection against raids, large nomadic and less rewarding. villages became more common (Secoy 1953:52). This further increased dependence on the buffalo, a resource rich enough to support large populations. The overwhelming dependence on the buffalo was well recognized by some American military officers who advocated extermination of the buffalo as a means of defeating the tribes.

This new pattern of mounted, nomadic buffalo hunting required a good supply of horses. While raiding was common, trading seems to have been a more dependable method of acquiring horses in the early horse days. During the 1700's the Shoshone, one of the first Northwestern Plains tribes to possess the horse, were constantly raiding other tribes for slaves to be traded in the south for horses (Fowler 1965:57).

Whenever one group possessed military superiority, pitched battles were rare. The well-armed Blackfoot eventually forced their Shoshone enemies into adopting guerilla warfare tactics. The Shoshone waged a defensive war until they found an opportunity to attack smaller, isolated groups of the Blackfoot (Secoy 1953:52). Essentially, this same pattern of hit-and-run raiding was continued by the Plains Indians when confronted by the overwhelming fire-power of the Americans. The Indians would rarely enter into a large scale engagement without possessing a superior force.

Confronted by what appeared to be a hostile party of Indians, Stansbury 'forted up'. This was a standard technique used by Indians and whites when confronted by a numerically superior enemy. Early accounts from the region show its widespread use. The party of Arapaho that met Robert Stuart at the north end of the Laramie Range in 1812 built two "breastworks of logs" to stay in for the night (Rollins 1935:192). Rufus Sage reported three "Indian forts" on the head of Rock Creek in 1842 (Hafen and Hafen 1956:333), and Fremont a year later saw three "strong Indian forts", recently occupied, on the upper west fork of Laramie River¹ (Fremont 1845:124). In 1846, Parkman discovered several "rude little forts" in the Laramie Range (Wade 1947:456), and Stansbury in 1850 reported several old Indian forts on the Medicine Bow River. He also described twenty conical timber lodges, what he called "Indian forts of lodges", at his crossing of the North Platte above Saratoga (Stansbury 1852:248, 245-246). These timber lodges were commonly used by the Plains Indians for war, while similar structures were used by the Utes

¹Frederick Dellenbaugh believed this to be Four Mile Creek (Dellenbaugh 1914:129).

on hunting trips and by the Sheepeater Shoshone as summer lodges. What appears to be a timber lodge was recently reported in the Medicine Bow National Forest along the North Platte River (Paul McKillip 1981, personal communication). There is also a war lodge reported by Frison (1978:62) at Green Mountain near Rawlins.

Hunting

The link between man and buffalo on the Northwestern Plains has been strong since Paleo-Indian times. Cooperative hunting of buffalo by large groups of people occurred in the area for over 11,000 years (Frison 1978). Styles of hunting changed and the range of the buffalo fluctuated, but the basic communal hunting pattern persisted through historic times.

With the increase in buffalo herds during the Little Ice Age, roughly A.D. 1400 to A.D. 1800, and the acquisition of the horse during the latter half of that period (Ewers 1955:332, Reher 1979:9), the rewards of the mounted buffalo hunter increased tremendously. Greater mobility enabled fewer men to range farther, take greater numbers of buffalo, and transport them home easier. This increased efficiency provided the Plains Indians with a degree of affluence unknown among many hunter/gatherers.

By the early 1800's, the basic technique for hunting buffalo on horseback was the surround (Arthur 1974:66). This technique was witnessed by Francis Parkman in 1846 when he accompanied a band of Oglala Sioux on a hunt near the base of the Medicine Bow Range. They were probably camped somewhere on Rock Creek (Neal 1978:14) when scouts reported buffalo to the west. The men in the camp quickly grabbed their weapons and rode out of the village with Parkman joining them. "All was haste and eagerness," Parkman reported. "Each hunter whipped on his horse, as if anxious to be the first to reach the game."

After riding steadily for an hour and a half, they saw scouts in the distance signaling that buffalo had been discovered. They soon reached the ridge where the scouts were stationed and readied their equipment.

...some thirty of the hunters galloped away towards the left, in order to make a circuit under cover of the hills, that the buffalo might be assailed on both sides at once. The rest impatiently waited until time enough had elapsed for their companions to reach the required position. Then riding upward in a body, we gained the ridge of the hill, and for the first time came in sight of the buffalo on the plain beyond.

The hunters raced down into the basin toward the herd.

...each hunter, as if by a common impulse, violently struck his horse, each horse sprang forward, and, scattering in the charge in order to assail the entire herd at once, we all rushed headlong upon the buffalo. We were among them in an instant. Amid the trampling and the yells I could see their dark figures running hither and thither through clouds of dust, and the horsemen darting in pursuit.

While we were charging on one side, our companions attacked the bewildered and panic-stricken herd on the other. The uproar and confusion lasted but a moment. The dust cleared away, and the buffalo could be seen scattering as from a common centre, flying over the plain singly, or in long files and small compact bodies, while behind them followed the Indians, riding at furious speed, and yelling as they launched arrow after arrow into their sides. The carcasses were strewn thickly over the ground (Parkman 1849: 216-222).

Even though the gun was widespread among the Plains Indians at this time and was used extensively in war, the bow and arrow was preferred for hunting buffalo. On horeseback at close range, it proved the most efficient hunting weapon until the introduction of the repeating rifle.

Hunting in the mountains followed a different pattern, usually involving only individuals or small groups. Toward the end of winter when dried buffalo meat ran low, the Eastern Shoshone would hunt elk, deer, mountain sheep, and occasionally wood buffalo by driving them into deep snow with dogs (Fox 1976:4). They would also use dogs to corner mountain sheep in areas where they could subsequently be shot (Lowie 1909:185). While traveling through the Laramie Range, sixty to seventy Sioux spotted a herd of mountain sheep and went after them on foot. Parkman (1849:274) reported that they only killed a half-dozen of them during the afternoon's hunt, which may be one reason why the Sioux concentrated their attentions on buffalo.

Elk are reported to be the most important meat source after buffalo for both the Eastern Shoshone and the Northern Arapaho (Elkin 1940:208; Fox 1976:4). Both tribes hunted elk year round as the opportunity afforded.

There is also some evidence for cooperative hunting in the mountains. Three game traps are reported from northwestern Wyoming that Frison (1978:264) believes to have been used by the Shoshone. The methods involved are similar to those used to trap antelope in lower elevations.

Sharing of the kill is widespread among hunting/gathering people. There are times when even good hunters are unsuccessful, so a tradition of sharing, with implied reciprocity, is important to the survival of the group. Parkman states that the one who killed a buffalo was entitled to the hide and tongue; the remainder of the carcass could be claimed by anyone in need (Parkman 1849: 248). When Stansbury ascended the west flank of the Laramie Range he found his own hunters butchering a buffalo which they had recently killed. A half-dozen Sioux were helping since they had first wounded it with an arrow and had, therefore, claimed a share (Stansbury 1852:256).

The sharing of food with guests is an established custom among hunter/gatherers, and the guest is usually obliged to eat what is served. The Shoshone, like many Americans, could not stomach boiled puppy—a delicacy among many Plains tribes. Parkman (1849) reports having a rough time when he was continually feasted during a bout of dysentery, and Stansbury (1852) showed little grace when required to eat boiled, dried buffalo without his accustomed salt.

While almost every part of the buffalo was used at one time or another by the Plains Indians, waste seems to have been common in times of plenty. Stansbury was shocked to see the dried carcasses of buffalo strewn about the Laramie Plains with only the choice parts butchered and the rest left to the scavengers.

The Medicine Bow region was well known for its herds of buffalo and other game. The plains and parks were rich in buffalo while large herds were reported in the Laramie Range. 'Buffalo bones have also been found high in the Medicine Bows. Leonard in 1831, Farnham in 1839, Fremont in 1843, Parkman in 1846, and Stansbury in 1851 all commented on the quantity of game in the region. To determine early settlement and subsistence patterns in the area it is also important to know whether the herd animals wintered in the high parks and foothills or left for lower country. Early ranchers thought the buffalo must have gone lower to avoid the harsh winters, but William H. Ashley in 1825 reported "innumerable herds of buffalo, antelope and mountain sheep" while traversing along the base of the Medicine Bow Range in midwinter (Dale 1941:129). In 1831-1832 Zenas Leonard and other trappers of Captain Stephens' party wintered on the Laramie Plains living off the buffalo and other game in the vicinity (Leonard 1839:10-28).

The Indians greatly feared that the white man would scare away the buffalo. A Platte River Indian once explained to an Indian agent that buffalo would not return to an area where they had once smelled the scent of the white man (Trenholm 1970:156). By at least 1868 the buffalo were gone (Dodge 1877: 130), having already disappeared west of the Divide by 1840 (Fox 1976:3). A small number of wood buffalo lingered in the mountains a few more years, the last one being spotted in North Park in 1895 (Peryam 1934).

While the Plains Indians hunted a wide variety of animals and had an extensive knowledge of wild plants, they were still dependent on one primary food source. Dependence on one animal is risky for a hunting/gathering society (Lee and DeVore 1968:40-42). The threat of starvation for buffalo hunters was especially great since the number of buffalo was dependent on the cyclic nature of the short-grass plains (Reher 1977), and their migration routes were unpredictable (Roe 1955). Throughout the 1800's, there were numerous reports of near starvation among the Plains tribes. When the Oglalas told Stansbury they had left Ft. Laramie to avoid small pox, it may have been as much a fear of starvation as a fear of the disease itself. If enough of the hunters were incapacitated by sickness, starvation would occur.

Parkman (1849) believed as early as 1846 that the fate of the Plains Indian was interwoven with the buffalo and predicted that with the end of the buffalo the Plains Indian would also disappear. While the Plains Indians have survived, the near extinction of the buffalo combined with military defeat and relocation in the 1880's effectively destroyed the integrity of the Plains Indian culture.

TRIBAL DISTRIBUTION

Colonel Brackett, the commanding officer at Ft. Sanders near the present day city of Laramie, reported in June of 1876 that the Indian troubles had ended (Revere 1960:73). He credited General Crooke's offensive in the Big Horn country for drawing the Indians away from the Medicine Bow region. But patrols were still being sent out through 1878, and in 1880 soldiers were ordered to intercept 300 Indians reported by settlers in North Park to be in the area. The scare was short-lived as the Indians were only on a hunting trip (Revere 1960:73).

Even after the Indians had been removed to reservations, they were still occasionally encountered in the area. As late as 1890, a small group of Indians, using a travois, were traveling along a branch of the Cherokee Trail at the north end of the Medicine Bow Mountains. When three deer ran across the trail and into a small grove of aspen, the men grabbed their rifles and sat down on the leeward side of the grove. The women circled the trees lighting fires on three sides. The deer were soon flushed out, but the grove and surrounding rangeland were badly burned (Burns et al. 1955:566).

The major tribes using the region during the Historic Period were the loosely allied Northern Arapaho, Northern Cheyenne, and Oglala Sioux from the east, the Eastern Shoshone from the west, and the White River Utes from the southwest. Territorial claims by the various tribes were often exaggerated, overlapping, and never secured by sustained use or military superiority.

What constituted the actual territory of mounted nomadic hunters dependent on migrating herds, constantly displaced by warfare, and subjected to intense cultural pressures from an expanding American frontier is difficult to say. Early mapmakers usually settled for printing a tribe's name in boldface letters across a huge geographic area. And even when the information they obtained from traders and explorers was accurate, it was quickly dated. After 1830 when the volume of historical documents increases, tribal territories still remain elusive.

Table 1 (pp.45-50) is a compilation of reported tribal activities and territorial claims within the Medicine Bow region. It provides an indication of tribal distribution and types of utilization in the area through time, but it should be used with caution. Based on historical accounts, it is biased by western cultural patterns—the most obvious being the scarcity of winter reports. There is also a wide range in the reliability of the accounts. Some are first—hand reports from trained observers; others are general, second—hand accounts which tend to be less accurate. Raids by the Sioux, Cheyenne, and Arapaho along the Overland Trail and Union Pacific Railroad became so frequent during the 1860's and 1870's that these occurrences are listed by year only, not individual actions.

A tribe usually consisted of several fairly autonomous bands operating under their own leaders. The exploitive net of a band would be spread as wide as security and resources allowed. This range was extended even further by individual parties traveling great distances for war, trade, and small-scale hunting and gathering. During the Historic Period, a small party from any

of the major tribes in the region might be encountered from Mexico to Canada.

After 1800 the Medicine Bow region falls outside what would be considered the home territories of the tribes that used it. The core area for the northern bands of Arapaho and Cheyenne from the early 1800's to the early 1860's was generally east of the Laramie Range between the North and South Platte rivers, although a number of winter camps were made outside this area. The eastern bands of the Shoshone were generally centered in the Green River and Wind River region, while the core area of the Oglala Sioux was north of the North Platte. The White River Ute were generally found southwest of the Sierra Madre Mountains.

The region, though, was well known for hunting, raiding, and trading. Sioux and Cheyenne were known to hunt extensively in the Laramie Plains and the Laramie Range, while the Arapaho pushed even farther into the mountain parks. While generally oriented to the plains, the Arapaho were called "mountain Indians" by their close allies, the Cheyenne (Trenholm 1970:33) since certain bands spent a good deal of the year in the higher elevations. The Shoshone hunted buffalo on the western Laramie Plains and one band is reported to have wintered in the upper North Platte valley between the Medicine Bows and the Sierra Madres (Mullison and Lovejoy 1909). The Utes pushed up from the south into the Little Snake River country and into the upper North Platte region where they were reported to frequent the Encampment River area (Medicine Bow Natinal Forest Collection, Box 5 1923). The Crow dropped down from the north to hunt and raid in the Laramie Plains, and there were even occasional reports of Gros Ventre and Pawnees in the region. There is also one account of a horse raid on a group of trappers by the Arikara, a Missouri River tribe. This is reported to have occurred sometime before 1841 near the base of the Medicine Bow Mountains (Stansbury 1852:250). The Arikaras were known to have spent the years 1832-1837 hunting along the Platte River from the forks to the mountains (Denig 1950). This dispersal from their river villages was caused by crop failure, Sioux raids, and the scarsity of buffalo. The Arikaras also attacked a party of trappers in the vicinity of the Laramie Range in 1833 (Leonard 1839:53-63). Combined with the pre-1800 accounts of Commanche, Kiowa, Kiowa-Apache, and Plains Apache, the region presents an intricate cultural mosaic.

The history of the utilization of the area by both the Arapaho and Shoshone is presented in greater detail in order to provide a clearer picture of the type and intensity of historic Indian involvement in the area.

The Shoshone

The Shoshone, commonly referred to as the Snakes in historical accounts, seem to have entered the Northwestern Plains from the Great Basin (Wright 1978: 121). Both linguistic and archeological evidence suggests an arrival in southwestern Wyoming by the 15th century. The Commanche are thought to have split off from the Shoshone and moved eastward during this period, while the Shoshone pushed to the northeast (Wright 1978:122). The Shoshone may have been in the Laramie Range area during the 16th to 17th centuries (Zeimens 1977:45), but the main thrust of their expansion was further north.

The Shoshone and Commanche were among the first groups on the Northwestern Plains to possess the horse, probably acquiring them between 1690 and 1700 (Haines 1938:435). The Spanish stated in 1720 that the Commanche frequented a river in the north, most likely the North Platte (Hyde 1959:58). In this same year, the Shoshone were known to have reached into the Plains as far north as Southeastern Alberta (Wright 1978:124).

At least one band of Commanche, the Yamparika, were in the mountains and plains of southern Wyoming from the mid-1700's to as late as 1790. George Hyde (1959:58-59, 123, 157, 197) has placed this band in the Laramie Plains, the upper North Platte, and in the area west of the Sierra Madres. They were eventually driven south by armed enemies, possibly the Kiowa who have a tradition of driving the Commanche south from the Black Hills country prior to 1790 (Nye 1962:viii).

Within a single generation the Shoshone were pushed back from the Plains to an area west of the Continental Divide by a combination of better armed enemies and small pox (Wright 1978:124, Hyde 1959:156). The Shoshone are believed to have begun using the mountain areas in northwestern Wyoming as a refuge during this period (Wright 1978:132).

The Shoshone maintained contact with the Spanish settlements to the south and made periodic trading trips by way of the upper North Platte and the mountain parks in Colorado. George Hyde (1959) calls this the Old Snake Trade Route. Lewis and Clark were told of a trade route used by the Shoshone, and the Shoshone are believed to have traveled south along this mountain trade route in 1811 and 1826 (Hyde 1959:123,156-157).

The best archeological evidence for the Shoshonean presence in the region is a ceramic style known as Intermountain Ware. This is generally associated with the Shoshone and is found at sites in the Laramie Plains, northern Colorado, and frequently in the Red Desert (Reher 1971; Wright 1978:122). Diagnostic Shoshone artifacts have not yet been reported for the Medicine Bow National Forest.

One of the first forest rangers in the Medicine Bow region was John H. Mullison who arrived in the area in 1868. At one time he worked as a post trader among the Utes, was apparently well liked, and was told that during the winter of 1840-1841 an allied band of 2500 "Snakes, Shoshoni, and Bannock" wintered along the North Platte from the crossing of the Union Pacific Railroad south to the Colorado border. This group claimed as its territory the surrounding forest and the country from the source of the North Platte north to the Seminoe Mountains. That winter was said to have been exceptionally hard, with the snow four to five feet deep and crusted by early in the new year. Most of the buffalo and other game in the area died, while starvation combined with small pox were reported to have killed 1800 of the Indians. Due to this disaster the area was considered bad medicine by the Shoshone and abandoned. For the next ten years the Utes and Arapaho were reported to have fought over this region (Mullison and Lovejoy 1909). A similar killing winter was reported to have occurred on the Laramie Plains in 1844-1845 (Dodge 1877:129-130). This may have been the same winter as Mullison's story, the discrepancy in dates due to both being second-hand accounts.

Around 1843 a war party of Oglala Sioux caught two Shoshone in the Medicine Bow Mountains, killing one outright and capturing the other. The prisoner was scalped alive and then burned to death (Parkman 1849:238). Two years later the Shoshone destroyed a war party of ten Oglalas on the Laramie Plains. This almost precipitated an all-out war with the Sioux. To avoid a war, the Shoshone returned the scalp of a chief's son with a parcel of tobacco tied to it. If the Sioux had been appeased, the custom was for the tribes involved to exchange gifts and adopt children from each other's tribe (Lowie 1909:195). The Shoshone gesture was not accepted, but the war never did materialize due to feuding among the Sioux and the skillful diplomacy of the traders whose profit would have been hurt by a general war (Parkman 1849:114).

The Shoshone were still claiming the territory around the Medicine Bow Mountains in 1850 (Hyde 1959:181). This claim, though, was ignored by the government at the 1851 treaty council at Ft. Laramie. Since the Shoshone lived west of the Rocky Mountains they were considered outside the jurisdiction of the council which was then only concerned with Plains tribes.

When James D. Doty, the superintendent in charge of Shoshone affairs, negotiated a treaty with Washakie's band in 1863, a strip of territory running east to the North Platte was claimed which included the Sierra Madre Mountains (Madsen 1980:36-38). After this period the major focus of the Eastern Shoshone shifted progressively north to the Wind River Basin.

The Eastern Shoshone annual subsistence cycle revolved around the fall buffalo hunt. The four dispersed bands would gather together in the Wyoming Basin and then travel east of the Divide to hunt (Fox 1976:3,4; Oliver 1962:39). They would then pack the dried buffalo meat back to winter camps, usually in the Bridger Basin or Wind River Valley, and would remain there until late February or early March. Winter camps would break up and rendezvous for the shorter spring buffalo hunt after which they would scatter into the higher country to hunt and fish in small groups. The summer and early fall were an important time for gathering roots and berries (Fox 1976:3-4).

The White River Utes were also dispersed during the summer (Steward 1974:26). Both the Utes and the Shoshone may have adopted this pattern since their enemies, the Plains Indians to the east, were strongest during the summer when they gathered in large numbers for their tribal hunt and ceremonies.

With the Shoshone pulling back and the Arapaho generally east of the Divide, the Utes began pushing further north into the Medicine Bow region. From the 1850's to 1880 they frequented the North Platte and Little Snake drainages. A battle was reported between the Utes and Sioux on Pass Creek in 1856 (Medicine Bow National Forest Collection, Box 5 1927), and in 1868 a Ute war party killed three tie hacks near Indian Creek in the Saratoga Valley (Peryam 1934). A year later, a party of Utes visited Douglas Creek and North Park and then spent a couple of months in the Denver area on their way to hunt buffalo (Steward 1974:13).

¹Parkman's journal mentions a 'Utah' Indian being captured (Wade 1947:460), in his book he calls the Indian a Snake.

In 1879 Major Thornburgh, who would be killed in battle with the Utes a few months later, investigated a complaint from Agent Meeker that a party of Utes had deliberately set fire to the forest in the Sierra Madre Mountains and North Park area. He found that a party of 100 Utes had appeared at a mining camp on the divide between Jack and Savery creeks to trade, but they were peaceful, had set no fires, and had then headed south into North Park (Emmitt 1954:96-101).

Arapaho

The Arapaho began their westward migration from central Minnesota, preceding onto the High Plains both the Cheyenne and Sioux. By A.D. 1700 the Arapaho reached the mouth of the Little Missouri River where the Atsina split off to the north. By 1730 the Arapaho began moving south and reached the Black Hills country. They were met there by the Cheyenne around 1800. The Sioux were the last of the Plains tribes to cross the Missouri River and were exerting considerable pressure on the tribes further west. The Arapaho soon moved south, followed by the Cheyenne. Bands of both the Arapaho and Cheyenne eventually reached the Arkansas River country, while other bands remained in the north between the South and North Platte rivers (Hewes 1948: 51,52).

Between 1800 and 1806, the Arapaho, along with the Padoucas (Plains Apache) and Kiowa, were reported trading between the North Platte and the headwaters of the Arkansas (Hyde 1959:191). At that time their range probably overlapped that of the Yamparika band of Commanche who had recently abandoned their territory in southern Wyoming. The Lewis and Clark map places the Arapaho on the headwaters of the North Platte, which is consistent with other reports for this period.

Robert Stuart and six Astorians intended to winter over in 1812 at the north end of the Laramie Range on the North Platte when they were discovered by a war party of twenty-three Arapaho. The war party was on its way north to raid the Crow Indians and, being on foot, intended to ride captured horses back. They told Stuart their village was on the South Platte (Rollins 1935: 192). During this same period, Ezekial Williams and a party of trappers traveled from the Big Horn country south. Their exact route is unknown, but it is possible they crossed the Medicine Bows at one point (Sprague 1964). Part of the group eventually reached the South Park area where several trappers were killed by Arapaho (Rollins 1935:lxxxiii).

The Arapaho were also reported responsible for the death of a trapper around 1821. Jacque La Ramie, a French-Canadian, wintered alone on the Laramie River and was killed either at the mouth of Sybille Creek or further upstream on the Laramie River (Trenholm 1970:46; Rollins 1935).

These occasional reports of war parties are the only information available on the winter use of the region by the Arapaho. Rufus Sage considered the region dangerous only between May and November (Hafen and Hafen 1956:329), while Ashley and a company of his trappers passed through the area in the winter of 1825 without encountering any Indians. In addition, Captain Stephens and his party of trappers wintered on the Laramie Plains in 1831-1832

without reporting any Indians in the vicinity. A possible explanation for the lack of winter use of the region, at least during post-horse times, is that the wrong variety of cottonwood grew in the area. The inner bark of cottonwood was often fed to horses during the winter when the grass was poor. Horses, though, would only eat what was known as sweet cottonwood, not the bitter type. Ashley found only the bitter variety when crossing the Laramie Plains. The Stephens party discovered this fact too late and lost all their horses which forced them to attempt two unsuccessful attempts to walk to Santa Fe from their winter camp on the Laramie River.

The Arapaho had the capability to winter in the higher elevations since they are known to have wintered in several of the mountain parks in Colorado (Toll 1962), and used snowshoes for hunting buffalo in winter (Lowie 1954: 12,43). The lack of winter reports of the Arapaho in the Medicine Bow region may be due to an inability to sustain large horse herds in the area.

The normal seasonal pattern of the Northern Arapaho was for the four bands to separate after the summer hunt and Sun Dance and then move into their winter camp. This was usually within five to thirty miles of each other. Their winter camp was chosen at a wooded place in the foothills with good grass and plenty of water and game (Elkin 1940:209-210). The area between the bands was considered a game preserve where no individual hunters were allowed to hunt. The soldier societies would police the area, occasionally herding a small group of animals to an area where they could be taken without scaring off the rest of the game. In spring the bands would moved separately, but close to each other, down into the plains to hunt antelope, eventually regrouping for the tribal buffalo hunt (Elkin 1940).

The Arapaho were still reported at the source of the Platte River in 1830 (Phillips 1940:312). The Sioux, though, generally stayed above the North Platte until the establishment of Ft. William (later Ft. Laramie) at the mouth of the Laramie River in 1834. This post was built to attract the trade of the Sioux, Cheyenne, and Arapaho. The post was successful, and by 1840 the Sioux were reported hunting west of the Laramie Range (Wade 1947:398). During this period the Sioux formed an alliance with the Cheyenne (Gussow 1974:38) which also involved the Arapaho since they were allies of the Cheyenne. A Sioux war party attacked a small group of trappers near the headwaters of the Medicine Bow River in 1841 (Hafen and Hafen 1956:330), and later in the year attacked a party of Henry Fraeb's trappers at Five Buttes. west of the Sierra Madres. Jim Baker and several others trailed the Sioux eastward until the Indians reached their "stronghold" on the Laramie Plains (Mumey 1931:22-23). A few days later a combined force of Sioux, Cheyenne, and Arapaho attacked Fraeb's party and their Shoshone allies (Trenholm 1970: 115). This is reported to have taken place at the junction of Battle Creek and the Little Snake River (Hafen 1929:100). Others believe it was further up Battle Creek (Richard Cerise 1981, personal communication). By evening the attacking force withdrew after having suffered fairly heavy casualties. Reports vary between eight and forty killed, while Fraeb was among several trappers killed.

Raiding parties of Sioux, Cheyenne, and Arapaho were reported throughout the region for the next 35 years. During this period the Arapaho continued to hunt the mountain parks and were known to travel to the Medicine Bow Mountains to gather material for their weapons (Trenholm 1970:165).

In 1862 the Overland Stage route was relocated through Arapaho country in order to avoid Sioux raids to the north. After the massacre at Sand Creek, Colorado, the Arapaho joined the Sioux and Cheyenne in reprisals throughout the region. After attacking the town of Julesburg on the Platte in 1865, the Arapaho were forced by intense military pressure to seek refuge in the Powder River country. This began a pattern of wintering in the north and summering in the Medicine Bow region (Trenholm 1970:201). Throughout 1865 and again in 1867, there were numerous raids along the Overland Trail (Kuykendall 1917:96, U.S. Postmaster General 1867:5). Indian rights to the Black Hills and Powder River country were officially recognized in the Ft. Laramie Treaty of 1868, but raids continued in the Medicine Bow region along the route of the Union Pacific Railroad. In 1867, the Pawnee battalion of the U.S. Army patrolled across the Laramie Range as far as the Laramie Plains to protect survey parties that were being attacked (Grinnell 1928:213,214).

Hostilities by the Arapaho and their allies continued in the region until the mid-1870's when military operations forced a permanent shift to the north. After 1877 the Arapaho frequently served as scouts and in the 1880's were organized into a formal U.S. Army unit with flag, uniforms, and white officers (Rollins 1935:333, 342).

TABLE I

Date	Area	Reason	Source
ΑΚΑΡΛΙΙΟ			•
	. •		
1800-1806	headwaters of North Platte	trading	Hyde 1959:191
ca. 1804	headwaters of North Platte	unknown	Hyde 1959:189,190
1806	upper North Platte	hunting	Gussow 1974:28-29
1812	north end of Laramie Range	war party	Rollins 1935:192
ca. 1821	Laramie River	war party	Rollins 1935 ca. 1830
ca. 1830	source of Medicine Bow River	unknown	Phillips 1940:312
1839	North Park	hunting	Roe 1970:269
ca. 1839*	Saratoga Springs	curing	MBNF, Box 5 1951
ca. 1840	Medicine Bow Range	western boundary	Hafen and Hafen 1956
1841*	western Sierra Madre Range	war party	Alter 1925:197
1842	Laramie Plains	hunting	Trenholm 1970:115
1843*	North Platte crossing	war party	Fremont 1845:137
1843*	north side of North Park	village	Fremont 1845:282
1846	base of Medicine Bow Range	camp	Parkman 1849:245
1846	Medicine Bow region	unknown	Parkman 1849:243
1851	Laramie Range, Laramie River,	reservation	Trenholm 1970:137
	Medicine Bow Range	٤.,	
1856*	Laramie Range	guide	Bryan 1858:459
ca. 1856	north end of Medicine Bow Range	war ground	Bryan 1858:461
1860's	Laramie Range	travel	Emery 1940:7-8
1863	north of Sierra Madre	war party	Barnhart 1969:77-78
ca. 1863	Medicine Bow area	hunting, camp	Trenholm 1970:200-201
1865	Sierra Madre, Medicine Bow,	war party	Kuykendall 1917:96
	Laramie Range		
1867	Sierra Madre, Medicine Bow,	war party	U.S. Postmaster General 1867:5
	Laramie Range		

^{*}participant observation

Date	Area	Reason	Source
SIOUX		; ; ;	
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ca. 1800	Laramie Range	vision guest	Parkman 1849:147
ca. 1840	Medicine Bow Range	western boundary	Hafen and Hafen 1956
ca. 1840	west of Laramie Range	hunting	Wade 1947:398
1841	Laramie Plains	camp	Mumey 1931:22-23
1841*	western Sierra Madre	war party	Alter 1925:196
1841	north end Medicine Bow Range	war party	Hafen and Hafen 1956:330
ca. 1842	north end Medicine Bow Range	war ground	Hafen and Hafen 1956:329
1843*	base of Medicine Bow Range	war party	Fremont 1845:123
ca. 1843	Medicine Bow Mountain	war party	Parkman 1849:238
1845	Laramie Plains	war party	Parkman 1849:114
1845	west of the Laramie Range	camp	Parkman 1849:272
1846*	Laramie Plains	hunting	Parkman 1849:216
1846*	western side of Laramie Range	gathering lodge poles,	Parkman 1849:271-283
		plants	
ca. 1849	base of Sierra Madre	war party	Stansbury 1852
ca. 1850	western Sierra Madre	war party	Stansbury 1852:47
1850*	Laramie Plains	two villages, hunting	Stansbury 1852:252, 257
ca. 1856	north end of Medicine Bow Range	war ground	Bryan 1858:461
ca. 1856	Pass Creek	battle	MBNF, Box 5 1927
1859	north end of Laramie Range	proposed reservation	Hafen and Hafen 1959:180
1863	north of Sierra Madre	war party	Barnhart 1969:77-78
1865	Sierra Madre, Medicine Bow,	war party	Kuykendall 1917:96
	Laramie Plains	* · · · · · · · · · · · · · · · · · · ·	. ,
1867	Sierra Madre, Medicine Bow, Laramie Plains	war party	U.S. Postmaster General 1867:

^{*} participant observation

Date	Area	Reason	Source
CHEYENNE		•	
1806	upper North Platte	hunting	Gussow 1974:28-29
ca. 1839	Saratoga Springs	curing	MBNF, Box 5 1951
ca. 1840	Medicine Bow Range	western boundary	Hafen and Hafen 1956
1841*	western Sierra Madre	· · · · · · · · · · · · · · · · · · ·	Alter 1925:196
1842	Laramie Plains	war party	Trenholm 1970:115
		hunting	1
1843*	North Platte crossing	war party	Fremont 1845:137
1843*	base of Medicine Bow Range	war party	Fremont 1845:123
1850*	eastern side of Laramie Range	village	Stansbury 1852:259
1851	Laramie Range, Laramie Plains Medicine Bow Range	reservation	Trenholm 1970:137
ca. 1856	north end of Medicine Bow Range	war ground	Bryan 1858:461
1859	Laramie River	proposed reservation	Hafen and Hafen 1959:180
1863	north of Sierra Madre	war party	Barnhart 1969:77-78
1865	Sierra Madre, Medicine Bow,	war party	Kuykendall 1917:96
	Laramie Plains		
1867	Sierra Madre, Medicine Bow,	war party	U.S. Postmaster General 1867:5
	Laramie Plains		
UTE	• .		
	÷ ;	* :	
1839*	Saratoga Springs	curing	MBNF, Box 5 1951
1852	Laramie Plains	horse raid	Mathews 1946
ca. 1856	Pass Creek	battle	MBNF, Box 5 1927
1856	north end of Medicine Bow Range	war ground	Bryan 1858:461
1863	north end Medicine Bow Range	war party	Hafen 1926:252
1868*	upper North Platte valley	war party	Peryam 1934
1869	Douglas Creek	travel	Stewart 1974:13
1874	between Rawlins and Little Snake River	camp	Meschter n.d.
1875	Little Snake River	camp	Meschter n.d.
1879	Little Snake Valley	hunting	Meschter n.d.
1879	Jack and Savery Creeks	hunting/trading	Emmitt 1954:96-98
1880	North Park	hunting	Revere 1960:73
1000	HOLEH TALK	udite in it	MCACLC INDO-12

*participant observation

Date	Area	Reason	Source
SHOSHONE			
.=			
1790	parks and mountains of southern Wyoming	unknown	Hyde 1954:197
ca. 1803	upper North Platte River	trading	Hyde 1954:156-157
1811	upper North Platte River	traveling (trade)	Hyde 1954:156-157
1826	upper North Platte River	traveling (trade)	Hyde 1954:156-157
1841	upper North Platte Valley	winter camp	Mulllison and Lovejoy 1909
ca. 1842	north end Medicine Bow Range	war ground	Hafen and Hafen 1956:329
ca. 1843	Medicine Bow Mountains	hunting	Parkman 1849:238
1845	Laramie Plains	war party	Parkman 1849:114
1846	western Laramie Plains	territorial claim	Parkman 1849
1850	North Platte and Medicine Bow	territorial claim	Hyde 1959:181
	Range area	· · · · · · · · · · · · · · · · · · ·	
ca. 1856	north end of Medicine Bow Range	war ground	Bryan 1858:461
1863	Sierra Madre Range	territorial claim	Madsen 1980:36-38
		* 1	
		: • • •	
COMMANCHE			
		<i>:</i>	
1700's	east of Laramie Range	unknown	Gilbert and Larson 1981:10
1720	Upper North Platte River	unknown	Hyde 1959:58
ca. 1750-1790	mountains and plains of	unknown	Hyde 1959:61,123,197
	southern Wyoming	* *	
	• • •		
CROW		<u> </u>	
	•	- 	
1700's	Laramie River	unknown	Gilbert and Larson 1981:10
1846*	Laramie Peak	war party	Parkman 1849:134
		3 · · · · · · · · · · · · · · · · · · ·	

^{*}participant observation

Date	Area	Reason	Source
CROW			
1842*	base of Medicine Bow Range	village/war party	Hafen and Hafen 1956:334
ca. 1842	north end Medicine Bow Range	war ground	Hafen and Hafen 1956:329
1846*	east side Laramie Range	war party	Parkman 1849:120
13,0	date bita paramet kange	war parey	10491120
			·
KIOWA	•		
1800-1806	headwaters of North Platte River	trading	Hyde 1959:191
KIOWA-APACHE	• .		•
THE THE PROPERTY OF THE PROPER			
1681	southeastern Wyoming	unknown	Gilbert and Larson
		* .	1981:9
1700's	east side Laramie Range	unknown	Gilbert and Larson
			1981:10
PLAINS APACH	F		
I HILLIO III IIOII			
1650	southeastern Wyoming	unknown	Gilbert and
		数 () サーカン	Larson 1981:9
1800-1806	headwaters of North Platte River	trading	Hyde 1959:191
GROS VENTRE			
(Atsina)			
(11002110)		* *	
1841	eastern Sierra Madre Range	war party	Fremont 1845:281
1845	Laramie Plains	village	Parkman 1849:238
*participant	observation		

Date	Area	Reason	Source
ARIKARA			•
1833*	Laramie Range	war party	Leonard 1839:53-61
before 1850	base of Medicine Bow Mountain	ns horse raid	Stansbury 1852:250
CHEROKEES			
1849*	Laramie Plains, Medicine Bow	travel	Beiber 1937:333,341
1050	Range, Sierra Madre area		Wathern 10/6
1850	Laramie Plains, Medicine Bow Range, Sierra Madre area	travel	Mathews 1946
1852	Laramie Plains	travel	Mathews 1946
1170-			
PAWNEE			
		<u>.</u>	
1867	Laramie Plains	military patrol	Grinnell 1928:213,214

^{*}participant observation

AMERICAN INDIAN RELIGIOUS USE OF THE FOREST

Francis Parkman traveled with the Sioux back across the Laramie Plains after hunting buffalo near the Medicine Bow Mountains. They camped in either the Cow Creek (Neal 1978:17) or the Bar-M Creek (Cobb 1979) areas and gathered lodgepoles in the nearby Laramie Mountains. After a day spent resting, Parkman decided to wander into the mountains to escape the monotony of camp. After walking for some time he spotted an Indian in the distance who turned out to be his friend, Mene-Seela.

As I had approached noiselessly with my moccasoned feet, the old man was quite unconscious of my presence; and turning to a point where I could gain an unobstructed view of him, I saw him seated alone, immovable as a statue, among the rocks and trees. His face was turned upward, and his eyes seemed riveted on a pine-tree springing from a cleft in the precipice above. The crest of the pine was swaying to and fro in the wind, and its long limbs waved slowly up and down, as if the tree had life. Looking for a while at the old man, I was satisfied that he was engaged in an act of worship, or prayer, or communion of some kind with a supernatural being (Parkman 1849:269).

There was a general belief among the Indians that the sacred was not abstract and distant, but alive in every facet of nature. The sacred could manifest itself through natural forces like the thunder, wind, sun and moon, and through natural beings like the bear, antelope, and eagle. They also believed that an individual could make direct contact with the supernatural and so acquire the personal power necessary for succeess in life.

The acquisition of power took various forms, the most important being the vision quest. Around puberty a boy was instructed in proper conduct and the necessary approach to the sacred by either a shaman or, among the Shoshone, a relative (Jorgensen 1980:285). He would then undertake a vision quest, usually chosing a high, isolated place where the sacred was thought to be near at hand. Preparation for a vision quest might involve fasting, sweat baths, cold water immersions, or self-inflicted wounds. The Sioux would sometimes construct an enclosed pit to heighten sensory deprivation and increase the chance of a vision. The individual undertaking a vision quest would remain alone for several days until he had a dream or vision where a certain animal would appear and give advice, a song, or a certain ritual to follow. The vision experience would become his power, or medicine, for the rest of his life, and the animal would become the guardian spirit. Among females the acquisition of supernatural power was usually not as formalized and often occurred through dreams.

The vision quest played a more limited role among the Arapaho than most Plains tribes. The few that sought visions did so well past puberty and would keep their experience secret. Around the age of 45, they would formally presented their vision to the religious leaders to be sanctioned (Elkin 1940:218).

Parkman (1849:147) presents a story told by an old Indian of a vision quest which he reportedly undertook somewhere in the Laramie Mountains. As a young man the Indian had gone into the mountains and found a cave. With his face painted black, he lay fasting and praying for several days until an antelope appeared. This was considered by the Oglala to be a peace spirit, and it returned a number of times. Finally the antelope spoke telling the young man he was not to go to war, that his power would come instead from giving counsel to his people. The Sioux considered this an unusual vision since success in war was a power often sought through the vision quest. The Shoshone were also known to go into the mountains on vision quests (Lowie 1909:224-225), but not to the same extent as most Plains Indians.

While the probability is high that many areas of the Forest were used for vision quests, no evidence has been uncovered that a specific area or terrain feature was considered more sacred than others.

There are two areas, one in the Forest and the other adjacent to it, that have been considered in the past to have American Indian religious significance. Also, the Forest name, Medicine Bow, may have its origin in the Plains Indian concept of the sacred.

Vedauwoo

There is a local belief that the Vedauwoo rocks were considered a sacred area by the Indians, but proof of this is elusive. The name is an Arapaho word which was translated as "earth born" by Rev. John Roberts, an early missionary at Ft. Washakie. Occasionally Vedauwoo is interpreted as "earth-born spirit". The name was first applied to the rocks in 1924 when Mabelle Land Dekay wrote a play entitled Vedauwoo, A Pageant-Drama Based on Fact and Fancy. This was performed by the University of Wyoming Theater Department in a natural amphitheater in the rocks. That area became associated with the play and subsequently was referred to by the play's name, Vedauwoo. The State Historical Preservation Office found no specific religious significance associated with the rocks and recommended that the natural state of the amphitheater be restored (SHPO 1980).

Saratoga Springs

The springs at Saratoga, while outside the Forest boundaries, seem to have held religious significance for the Indians of the area. John H. Mullison (Mullison and Lovejoy 1909) said they were considered "big medicine", while Jim Baker, an early trapper and guide in the region, said the springs were used for curing. The Indians would enter the hot springs and then jump in the cold river, but when this treatment was used for small pox many of the Indians died and the springs became known as "bad medicine" (Medicine Bow National Forest Collection, Box 5 1951). Both Baker and Mullison stated that the area around the spring was considered neutral ground by various tribes. According to Mullison this neutral area extended in a twelve-mile radius which, if correct, would include portions of the Forest.

Medicine Bow

The origin of the name, Medicine Bow, has interested historians for some time. C.G. Coutant (1899:707) was one of the first to present the idea that the name originated from the Indians using the area to cut bow wood. He stated that the northern tribes would come annually to the base of the Medicine Bow Mountains to gather a variety of ash. Others believe the wood sought was mountain mahogany or even 'mountain birch'. Coutant interprets the word 'medicine' as meaning excellent, and says the area became known as the place where excellent bows could be procured. Medicine, though, was usually used by the Plains tribes in reference to something powerful in a sacred way. An early ethnographer, William P. Clark (1885:428), said medicine could denote "holiness, mystery, spirits, luck, visions, dreams, prophecies", or "the concealed and obscure forces of nature, which work for good or evil." Another similar account of the origin of Medicine Bow was given by Lewis Hickman, a settler in the area since the 1850's, who said the name was given to the stream where big pow wows were held and where wood was gathered for bows (Mullison and Lovejoy 1909).

The only specific information on bow manufacture in the area was from Willing G. Richardson (Burns et al. 1955), an early rancher living near Elk Mountain. He reported that a straight-grained, "white mountain cedar" which grew in Cedar Pass was used by the Indians to make bows. This was the only location in the area of this type of wood that he knew, and he mentioned he had once seen a bow made from it. Cedar is known to have been used for bows by the Plains Indians and the Shoshone (Lowie 1954, 1909; Clark 1885), and has the advantage of not requiring seasoning before use. While Cedar Pass is not far from the headwaters of the Medicine Bow River, its association with the naming of the river and mountains is not known. Friday, an Arapaho chief, informed Dr. F.V. Hayden during the winter of 1859-1860 that the Arapaho name for the Medicine Bow Mountains was the Hammer Mountains (Hayden 1862: 326). This referred to the stone hammers used in driving tent pins. The reason for giving this name to the mountains was not recorded. The mountains may have been a source of hammerstone material, or they may have resembled a hammer in some way.

SUMMARY

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The basins and plains of the Medicine Bow region were used heavily by the Plains Indians from the east and the Shoshone and Ute from the west. The degree to which they used the high country, though, is difficult to assess since almost all reports were based on observations of travelers in the lower country. Fremont (1845:283) did meet a party of Arapaho in Middle Park on their way into the higher mountains, the men to hunt and the women to gather roots. But the economic adaptation of the Indians in the area was primarily oriented to the plains and basins and the seasonal exploitation of the buffalo.

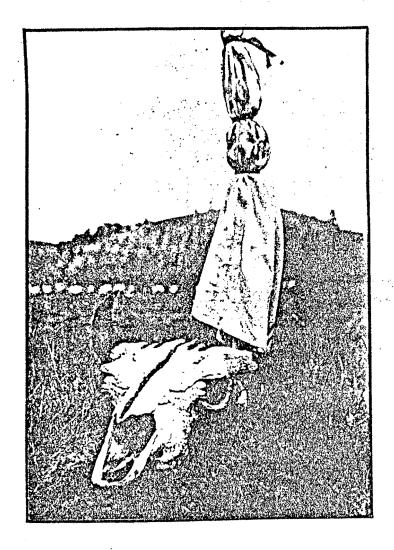
There is presently no clear case for intensive post-horse utilization of the higher country in the Medicine Bow region. Future archeological

investigations in the mountain areas, though, may uncover the additional information needed for an accurate reconstruction of the cultural patterns of the historic Indian tribes of the region.

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Painted buffalo skull near Sun Dance grounds. American Heritage Center, University of Wyoming.

Medicine man blessing sun dancer about 1904. The Sun Dance and tribal buffalo hunt were the focus of many Plains tribes. V.C. Trenholm Collection, American Heritage Center, University of Wyoming.



THE PREHISTORIC PERIOD

THE MOUNTAIN REGION IN NORTHWESTERN PLAINS PREHISTORY

Archeologists have usually considered the mountainous areas of the Northwestern Plains to be marginal to the main cultural patterns unfolding on the Plains. Some early recognition was given to the higher elevations as possible refuge areas during periods of climatic extremes (Huscher and Huscher 1941), but most serious archeological work was focused on the more spectacular big game kill sites in the lower elevations. Several developments, though, have helped bring about a more thorough consideration of the mountain environment. Beginning in the late 1960's, well stratified sites were found and excavated in higher elevations (e.g. Mummy Cave, Wedel et al. 1968) that exhibited long occupation and cultural adaptation independent of the Plains. During this same period, the early belief that the Paleo-Indian cultures were completely dependent on big game was questioned (Wilmsen 1970), which raised the possibility of early use of higher secological zones. Recently, the controversy over the presence of a pre-Clovis cultural horizon (e.g. Stanford 1979; Jennings 1978:23,37) has centered on sites generally located in higher areas than the Clovis sites of the Plains. Judge (in press) plotted all sites with pre-Clovis claims and found a pattern of sites with locations in higher elevation areas in the western portions of North and South America. Recent studies by Frison (1978:343-352) in the Big Horn Basin and contiguous mountain areas, Benedict (1975a, 1975b; Benedict and Olsen 1978) in the Colorado Front Range, and Wright, Bender, and Reeve (1980) in the Teton Mountains have demonstrated the existence of mountain and foothill oriented cultures since late Paleo-Indian times. elevation site on Mt. Jefferson in the Great Basin, recently investigated by David H. Thomas but not yet reported, also holds good potential for furthering an understanding of high country utilization (Riley 1981).

While belief among many archeologists is growing that man was present in the New World over 25,000 years ago, some of the oldest, undisputed evidence of Paleo-Indians in the Northwestern Plains comes from the Colby site near Worland, Wyoming (Frison 1978:86-110). This is a mammoth kill site with associated fluted Clovis points dated at 11,200 years old. The Union Pacific Mammoth site (McGrew 1961) near Rawlins is also a Clovis period site located near the Medicine Bow region.

It is not known to what extent these mammoth hunters used the higher country, but occasional surface finds of Clovis points are known from a number of areas. They have been found in the Big Horn Mountains near timberline (Frison 1978:85), and one is reported from above timberline in the Colorado Front Range (Husted 1974:864). This Clovis point was on a natural route (Trail Ridge) connecting the Plains to the east with the mountain parks in the west.

The presence of a possible grinding stone at the Clovis period, Hanson site (Frison 1978) and Clovis points in higher elevations and various ecological niches may point to a broad-spectrum hunting/gathering strategy for the

early Paleo-Indian period. There are also numerous surface finds of a style of fluted point found at an elevation of 8500 ft in a small area of the Big Horn Mountains. This may represent a transitional period between Clovis and Folsom, but has not yet been dated (Frison 1978:30).

With the extinction of the mammoth, a new procurement strategy developed to hunt a large, now extinct species of buffalo. This new adaptation is represented by fluted Folsom points that are about 10,700 years old.

While surface finds of Folsom points are common in the Northwestern Plains, occurrences in the high country are rare. At the Turk site on top of the Big Horn Mountains, there is evidence of Folsom point manufacturing (Frison 1978:31), and two Folsom points have been reported above timberline in the Front Range (Husted 1974:565). Folsom points also may have been unearthed on the Wagoner Ranch (Sec.7-T16N-R86W) just north of the Sierra Madre Mountains (Medicine Bow National Forest Collection, Box 5 1953). In addition, a probable Folsom campsite has been reported north of Rawlins but has not been excavated (Frison 1978:114).

During the remainder of the Paleo-Indian Period evidence increases for the utilization and seasonal occupation of the mountain region. Indications of this new adaptation have come primarily from the mountain areas of northern Wyoming.

The preferred environment in the Big Horn Mountain region during Paleo-Indian times seems to have been the high mountain meadows and open country between 7500 and 8500 feet. The lack of even higher sites may be due only to a lack of surveys conducted at those elevations (Frison 1974:107). This early use of the high country began a pattern which Frison (1974) believes lasted until historic times. This pattern involved cooperative buffalo hunting which brought the group together in the fall. During the rest of the year they would be dispersed, using a wide range of environments from the valleys to the high mountain meadows.

Cody Complex

The earliest site so far recorded for the Medicine Bow National Forest dates to the Cody Complex of late Paleo-Indian times. At the Hell Gap site (Irwin-Williams et al. 1973), the Cody Complex was dated 6640 B.C., a good representative date for the Cody period. Eden projectile points, two styles of Scottsbluff points, and the Cody knife are usually diagnostic artifacts for this period.

The Cody Complex marks the climax of Paleo-Indian bison hunting on the Plains (Frison 1978), although Cody sites are also found in the high country. Surface finds in the mountains and foothills of northern Wyoming are common (Zeimens and Walker 1977), but to what degree these finds represent a mountain adaptation is unknown.

¹ Designation of point types by non-professionals, especially in early reports, is unreliable. For example, initial reports from amateurs on the late Paleo-Indian, Jimmy Allen site described the points found there as being Folsom and Yuma types.

The type site for the Cody Complex is the Horner site (Jepsen 1953), a bison kill site near Cody, Wyoming. In the mountains forty-five miles to the west is Mummy Cave. This was occupied at the time of the Horner bison kill, but there is no indication of any contact between these groups. The reasons for this apparent barrier, cultural or ecological, are unknown.

Big Horn Mountains

The Big Horns have a long record of human occupation that developed separately from the better known Paleo-Indians of the Plains (Frison 1973: 311). The relationship between the mountain oriented groups and the ones from the Plains is not well known. Enough isolation did exist, though, for the development of a unique way of life in the high country.

The last of the late Paleo-Indian manifestations from the Big Horns is the Pryor Stemmed Complex, named for a diagnostic point type. These date from around 6400 B.C. and are found from the foothills to the high mountain meadows (Frison and Grey 1980:43). The Pryor Stemmed Complex was a local variation of a high country adaptation present in the mountains of western North America (Frison 1973:311). This adaptation involved a broad spectrum utilization of resources which was basically the same form of subsistence used during the later Archaic periods.

Mummy Cave

Mummy Cave is located in the Absaroka Mountains at 6400 feet. The excavated deposits have presented evidence of a mountain oriented subsistence system existing for the past 9000 years (Wedel et al. 1968:184; Wedel 1978:20). While occupation was not continuous, the cave was used during the Altithermal. This site was one of the first indications that man was present in the Northwestern Plains during that period. The key resource for the inhabitants of the cave over the entire length of occupation seems to have been mountain sheep which were probably hunted during the winter (Wright et al. 1980:193). Mummy Cave is the best dated sequence of occupation, exhibiting a high country adaptation, for the region.

A HIGH COUNTRY WAY OF LIFE

The movement into the higher elevations during the late Paleo-Indian Period required more than a shift in location. It also required a shift in subsistence strategy to match the greater variety of available resources. A model of this high country adaptation was presented by Loendorf (1973) and then elaborated and tested by Wright, Bender, and Reeve (1980), who based their ideas on fieldwork in the Teton Mountains.

The basic model states that the scheduling of a group's movement up a mountain will coincide with the delayed maturing of plants at higher elevations. While large game animals roughly follow a similar schedule, they are not the

prime reason for a group to be at a certain elevation at a particular time of year. Since the location of game animals is not as predictable as the location of edible plants, base camps will be situated in the immediate vicinity of one or more plant communities but still near the range of the game animals.

A group would winter in the lower foothills and hunt to supplement their stored food until edible plants were again available in the spring. The group would then move slowly up in elevation through spring and summer, keeping contact with whatever plant community was at its peak of productivity. Based on analogy from known hunter/gatherer societies, the men would continue to hunt throughout the seasonal round, while the women would do the bulk of the plant gathering.

Wright (1978) believes this mountain-based way of life continued in the Tetons until the arrival of the Shoshonean speakers in the 15th century. Increased competition between the Shoshone and the indigenous mountain people over winter ranges in the foothills eventually forced the indigenous people to give up their high country adaptation.

MOUNTAIN REFUGE: THE ALTITHERMAL

The Early Plains Archaic lasted from 7500 to 5000 years ago, roughly corresponding to the drier, warmer climatic stage known as the Altithermal (Antevs 1955). The degree of human occupation of the Plains during this time has been an on-going research problem. There was an early belief based on the apparent lack of human occupation in the Colorado Front Range between 10,000 and 4000 years ago, that there was a cultural hiatus in the Rocky Mountain Region for that period (Ives 1941). Over the years, this idea was expanded by others to include the northern Plains, but the time span was usually shortened to between 7500 and 5000 years ago (e.g. Mulloy 1958; Wheeler 1958; Wedel 1961). The strongest opposition to this idea came from Reeves (1973) who believed the lack of sites on the open Plains was due to both sampling error and geomorphic processes. Since the argument first began, though, many well-dated Altithermal sites have been found in the foothill and mountain areas of the Northwestern Plains. This has supported the belief that areas of higher topographic relief acted as a refuge for groups during the Altithermal (e.g. Huscher and Huscher 1941; Hurt 1966; Frison 1978:45; Wedel 1978).

Populations during this period may have fluctuated widely. In the Colorado Front Range, Benedict (1979; Benedict and Olsen 1978) has accumulated evidence for intense occupation of the foothills and the timberline area between 9000 and 8000 years ago and again between 6500 and 6000 years ago. This last period was a relatively short but intense drought that may have caused temporary abandonment of the Plains. While Benedict sees evidence for higher populations along the entire length of the Rocky Mountains, these groups may have operated within fairly limited areas. At least three cultural complexes have been recorded that were using the timberline area in the Indian Peaks region during this period. Benedict (1979:10; Benedict and

Olsen 1973: 323-327) believes the key to the disappearance of the Paleo-Indian hunters around 7500 years ago and the appearance of the McKean Complex 2000 to 2500 years later will be found in these mountain refuge areas.

In a study of subsistence during the Altithermal in the Big Horn Mountain area, Shaw (1980:102-108) described a shift in procurement patterns from plains-adapted to mountain-adapted game that were less affected by drought conditions. The settlement pattern that resulted was focused on the foothills. Winter camps were situated where the winter range of mountain and plains game animals overlapped. In the spring and summer these groups would shift to higher elevations, staying close to the movement of the animals. An increase in the use of plants and small animals would occur in the fall. As in other models of high country adaptation, Shaw stresses the importance of identifying both base camps and limited activity area in order to fully understand a group's seasonal pattern.

People continued to occupy the higher elevations throughout the Archaic and Late Prehistoric periods, although by Middle Plains Archaic times the population density in the open plains and intermountain basins increased dramatically. The earliest sites from the Middle Plains Archaic are McKean Complex sites from the Big Horn Mountains (Husted 1969; Frison 1978:53).

The McKean Complex is believed by Husted (1974:866) to be the beginning of a tradition which found its final expression in the historic Utes. Others have concluded there is no clear link between historic tribes and their prehistoric predecessors (e.g. Windmiller 1974).

Beginning with the Albion Complex in the Early Plains Archaic and extending through the Late Prehistoric Period, Front Range hunters have used an extensive system of game drives in the area above timberline. The animals they were trapping were probably mountain sheep (Bendict and Olsen 1978). This is the first clear evidence of communal hunting in the mountain environment. Game drives and traps are also common in the mountains of northwestern Wyoming. These were used in the Late Prehistoric and Protohistoric periods. The later ones are believed to have been used by the Shoshone (Frison 1978:267; Wright 1978). Benedict (1975a:173) believes the game drive system represented a true mountain adaptation, while Husted (1974:868) believes it reflected a pattern similar to historic tribes who exploited both mountain and plains.

Small sites from the Middle Plains Archaic through the Late Prehistoric periods have been found in the mountains of the Medicine Bow National Forest.

SUMMARY

There is good evidence that human groups had adapted to the mountains and foothills of the Northwestern Plains by the late Paleo-Indian Period. This basic adaptation continued until historic times, but the degree of cultural continuity is unknown. Evidence from the Front Range suggests the mountain areas were affected by climatic changes and population fluctuations like the

Plains environment. There seem to have been migrations into the high country and periods of abandonment, and certain mountain areas seem to have been occupied during particular periods while others were not. The Mummy Cave deposits indicate the high country of northwestern Wyoming was occupied throughout the Altithermal, while the record of occupation from the Colorado Front Range during the early Altithermal is absent.

Both the mountains of northern Wyoming and the Colorado Front Range have produced evidence of extensive occupation in the higher elevations. So far, the mountain areas of southern Wyoming have produced evidence of only limited use. Whether this reflects the actual pattern of prehistoric occupation or a lack of site detection is unknown.

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CULTURAL RESOURCES

KNOWN SITES

As of September 30, 1981, there were thirty-five prehistoric sites recorded for the Medicine Bow National Forest. The legal description recorded for one of these, 48CR104, places it outside the Forest, but the map included with the site form locates it within the Forest boundaries. When weather permits the location of this site should be field checked for confirmation.

Three sites, 48AB11, 48CR318, and 48CR2089, may be Paleo-Indian sites. The best documented of these is CR2089, a Cody Complex site from the late Paleo-Indian Period (ca. 8,500 BP). It is an interesting site since it is located above 8,000 feet and about a kilometer from permanent water. In Judge's study of Paleo-Indian occupation in the central Rio Grande Valley, the one factor exhibited by Cody Complex site locations thought to be applicable to other environments was the direct association with permanent water (Judge 1973). It may be that in a well-watered mountain environment, permanent water was not as important a variable as it was in the Southwest.

There are two sites, 48C0529 and 48CR788, that most likely date to the Late Plains Archaic (ca. 3000-1700 BP); one site, 48CR316, with a Middle Plains Archaic component (ca. 5000-3000 BP) and a Late Prehistoric component (ca. 1700-500 BP); and three sites, 48AB312, 48AB105, and 48CR2064, that are probably Late Prehistoric in age. There are no known sites from the Early Plains Archaic Period. The remainder of the sites have not been dated. All sites were dated by diagnostic artifacts. No sites in the Medicine Bow National Forest have yet been excavated, radiocarbon dated, or dated by other absolute methods. The lack of a good cultural sequence and reliable dates for the mountainous areas of southern Wyoming has greatly hampered interpretation of cultural resources in the past and will continue to do so.

Of the sites that have been analyzed by function, the majority appear to be related to hunting activities. There are two lithic procurement sites, 48CR185 and 48CR2088, and two tool manufacturing sites, 48C0530 and 48CR2093, also thought to be hunting related (Fawcett and Francis 1981).

While no formal attempt has been made to link site location to environmental features, proximity to streams seems to have been a common factor in site selection. The majority are located on stream terraces or floodplains. Only two sites are reported in saddles, and five were found on ridgetops or slopes. This seems to be at variance with the findings reported from Routt National Forest in northern Colorado, a contiguous region south of Medicine Bow National Forest. The great majority of sites were located in, or adjacent to, passes and saddles (Ward-Williams and Foster 1976). Many of

the sites from the pass and saddle areas, though, were also located on stream terraces.

Based on twelve prehistoric sites recorded during the 1980 field season, a comparison was made of sites found at different elevations (Fawcett and Francis 1981). There were no significant differences found in site area, artifact density, distance to water, or vegetative diversity between high and low elevation sites. The number of artifacts per site, though, did decrease with an increase in elevation.

Sites in the Medicine Bow National Forest have been found in both open and timbered areas, on flat ground and on steep slopes, near permanent water and away from it. A typical site, though, is a light lithic scatter of non-local material, often containing several tools, located on a fairly level stream terrace, in an open park but close to the timber, and situated within a diverse plant community.

The difficulty with the types of sites that have been found to date is that they do not match site characteristics from adjacent areas, or fit smoothly into the settlement/subsistence models developed for other high country areas. Since few of the Forest areas have been comprehensively surveyed, this variance may be more apparent than real.

POTENTIAL SITES

The most recent estimate of site density in the Forest is 1.58 prehistoric sites per square mile (Fawcett and Francis 1981). This may not reflect the true site potential since the precision of the 1980 sampling methodology was estimated at 6.93%. The 1980 survey, though, had the best developed research design and located the highest density of sites to date. Another factor in estimating site potential is the high clustering of known sites. This would mean site density is much higher in certain areas than the estimates for the Forest as a whole. To identify these particular high site density areas by environmental factors was not attempted by any previous surveys. The main reason given for not attempting predictive models was the low number of recorded sites which might invalidate any generalizations derived from it. Another problem has been the lack of confidence in previous surveys — incompatable recording methods, incomplete site information, especially environmental factors, and the lack of artifact analysis or proper description.

As an initial step in developing predictive statements, a table (pp.65-66) has been compiled where settlement/subsistence models have been broken down by factors with predictive value. Most of these models have been developed for other areas of high-relief topography. Some have been formally presented, others are only listings of site characteristics. Settlement/subsistence patterns for two historic tribes (Northern Arapaho and Eastern Shoshone) are also included. In addition, general site characteristics from previous Medicine Bow National Forest surveys are presented where data are available.

									:					
Region		Topography	Period	Sesson	Primary Economic Activity	PREDICTIVE Primary Resource	TABLE Site type or Group type		Site Distribution	Timbered/ Opened	Vegetative Diversity		Artifact Assemblage	
North Pl		foothills	Bistoric	winter	hunting	elk, buffalo	band		clustered			+		
South Platte: Northern Arapsho (Elkin 1940)		plains		spring	hunting	antelope	band		clustered	open				
	940)	plains, intermountain basins	-	sumer	hunting	buffalo	tribal cir	rcle	clustered	open		+		
Big Horn Hountains (Shaw 1980)	foothills	Early	winter-	hunting	buffalo,	base camp								
			Plains Archaic	early spring		elk, mountain sheep		,						
•		foothills		late apring	hunting/ gathering	small game, plants			: :					
		high mountain meadows, slopes		gummer	hunting/ gathering	large game, plants					•			
,	1	foothills	↓	fall	hunting/ gathering	amali game, plants					, -	•		
Colorado Front		foothills	Early Plains	winter										
N Range D (Benedic & Olsen		timberline & above	Archaic	summer, early fall	hunting	mountain sheep	hunting ca game drive lines				•		rock cairns, low walls, pits	
Piceance Northwes	t	sheltered valley	Prehistoric & Historic	winter	**			and the second second	* *,					
Colorado (Grady 1980)		streamside, marshland communities	(Ute)	spring	gathering	roots; cat- tail, reeds, rushes		rando			+			
		high country		summer	hunting	deer		clust	ered	,	+		/metates In meat	
		low country (+8000')		fall	gathering, hide prepar- ation :	pinyon nuts, juniper berries		rando	•		_	proces		
Wind Riv Eastern (Fox 197	Shoshone	basin, valley, foothills	Historic	winter	hunting	elk, deer, mountain sheep	band		clustered			+		
•	-,	plains, basins		spring	hunting.	buffalo	tribal ci	rcle	clustered	open		+		
		high country		late spring	hunting/ fishing	elk, deer, mountain	small gro	oup	dispersed					
		high country, foothills		summer, early	gathering	roots, berries	small gro	oup	dispersed					
		plains, inter- mountain basins		fall	hunting	buffalo	tribal ci	rcle	clustered	open				
Mark Carlond Sales Care	tal have a series to be	to the contract of the contrac	Carlos a form our a		7 4 2	en and the same		: , ¥		e e e e e	and the second discounts	A constituent to the minimum	gr o kant kin — al e sende a new mente menograpsy species sendenga , sendenga	

Region	Topography	Period	Season -	Primary Economic Activity	PREDICTIVE Primary Resource	TABLE Site type or Group type	Site Distribution	Timbered/ Opened	Vegetative Diversity	Near Water	Artifact Assemblage
Teton Mountains (Wright, et al. 1980)	low country	Early	winter	hunting				N.	. •	-	
	valleys foothills- high country (+8000') high country	Plains to Late	*pring	gathering	blue camas			ę.		•	
		Prehistoric	Summe F	gathering	blue camas						
			late summer	hunting	elk, deer, mountain sheep			· ·	•		
	foothills		fall	gathering	berries		* * * * * * * * * * * * * * * * * * *				
	near pass or meadow		•	hunting/ gathering	blue camas, mountain sheep	base camp (large)	* * * * * * * * * * * * * * * * * * *	open meadows	+ i	not mportant	hearths
		•		specialized	only one resource	task specific site (small)	associated with base camp				tools related to single function, lack artifacts,
				:		1					no projectile points
Hedicine Bow N.F (Larson 1974)	. otreamslde					small temporary activity areas				+	,
MBNF (Reiss & Larson 1978)	streamside			, , , , , , , , , , , , , , , , , , ,		small hunting/ gathering		margins of open meadows		+	
MBNF (Chase & Arthur 1980)	primarily stream terrace & floodplain			•		small, with buried components		open & timbered		+	
MBNF (Fawcett & Prancis 1981)		Paleo-Indian to Late Plains Archa		hunting		small hunting camps	:		+		*
Routt National Forest, northern Colorado (Ward- Williams and Foster 1976)	pas s			· · · · · · · · · · · · · · · · · · ·		primarily large sites, greatest number	cluatered	***************************************	+		
	saddle stresm terrace			f	•	few sites, small	clustered		+		
	valleys			· · · · · · · · · · · · · · · · · · ·	NORMALAKAN	hunting camp			+		projectile points, scrapers, knives, debitage
1						ASALI and an Entire	(1070)				

Following Tainter (1979): Hunting camps - edge angles 26-35°, straight to convex edge shapes, few retouched edges, step fractures and blunting, few concave edges, projectile points, high tool density; plant gathering camps - edges greater than 45°, milling or pounding implements, absence of projectile points; tool preparation site - un-utilized debitage, complex tool production (platform preparation); combined site - a combination of above.

The locations where sites are least likely to be found may be as important for planning purposes as locating the higher potential areas. There has been very little analysis of areas in the Forest that have been surveyed but where no sites have been found. The linking of cultural resource information with the computerized environmental resource inventory of the Forest Service will facilitate this analysis. One survey in the Routt National Forest (Ward-Williams and Foster 1976) found that the least likely area for sites was heavily forested, north-facing slopes greater than 50° with homogenous topography (no intermittent streams or gullies).

There have been various recommendations from past surveys in the Forest as to which areas should not be surveyed. Forested areas, heavily vegetated areas, slopes over 15%, wet meadows, and boulder fields have all been suggested. While some areas are more difficult to survey, or unlikely to produce high site density or the more common types of sites, all varieties of terrain have a potential for cultural resources and must be surveyed if threatened by impact. As has been suggested (Fawcett and Francis 1981), a Level III (new Level II) survey could realistically reduce the sample fraction in low probability areas.

In order to properly estimate the potential for cultural resources in the Forest it is necessary to have a clear perception of the patterns of past utilization. The lack of a dated cultural sequence for the Forest has made this understanding difficult. For future surveys it is recommended that limited testing be conducted during the initial recording phase of the survey at all sites suspected of having subsurface cultural deposits. An effort should be made, where appropriate, to radiocarbon date charcoal samples from all hearths. In addition, a concerted effort should be made by the Forest Service to locate sites with the potential to yield stratified, dateable deposits. Rockshelters often produce good conditions for preservation and a reconnaissance should be undertaken to locate these types of sites, especially in the lower elevations where winter camps may have been situated. The drier, rocky areas of the Laramie Peak District might be a good place to begin such a reconnaissance.

REPORTED SITES

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Due to the lack of recorded prehistoric sites in the Medicine Bow National Forest, a compilation of reported sites, which have not been formally surveyed or recorded, is included. They can help provide a rough idea of the potential for cultural resources in the Forest. These reports cover a wide range of reliability from trained, para-professional observations to unattributed, second-hand accounts from early Forest Service memos. While these reports represent different levels of information, all can be useful if approached with caution. As a rule of thumb, the more general a report, the less reliable.

Trails

Cherokee Trail

When reports of the 1849 gold discoveries in California reached the Cherokee settlements in the Oklahoma/Arkansas border area, an expedition was organized under Captain Lewis Evans. This group of highly acculturated Cherokees traveled west in wagons and maintained a steady correspondence to their homes and the local Cherokee newspaper. When they reached Greenhorn, Colorado near Pueblo, the party split up. Most sold their wagons and bought pack horses; others kept their wagons and went north to intersect the Morman route on the North Platte. The pack horse party hired a guide named Owens who had been a member of Fremont's exploring party (Bieber 1937:333, 341). The route this party traveled, which closely paralleled Fremont's 1843 route as far as the North Platte, eventually became known as the Cherokee Trail. Cherokees were still using this route as late as 1852 (Mathews 1946).

There are many variations of the Cherokee Trail reported in the Medicine Bow region. The main branch crosses the Laramie Plains, goes south of Elk Mountain, crosses the North Platte at the mouth of Lake Creek, and then goes up Jack Creek to Twin Groves. From here, one branch probably dropped south to the White River country, while the other continued west to Ft. Bridger. Another branch reportedly came up through Middle and North parks and then hugged the eastern foothills of the Sierra Madre to eventually intersect with the north branch near Jack Creek (Burns et al. 1955). There were also variations of this branch. Another report has a branch crossing the Pass Creek divide north of the Snowy Range and then proceeding down the Medicine Bow River (Medicine Bow Forest Collection Box 5:1953).

The Cherokees may have taken various routes in their crossings to California and back, but it seems the name, Cherokee Trail, was probably applied by the early settlers to other Indian trails. The Fremont route the Cherokees themselves followed was, at least in part, already an Indian trail. Fremont reports following a large Indian trail between the Cache le Poudre and Laramie rivers, and when he crossed the Medicine Bow Range south of Elk Mountain he described a broad trail, recently traveled, leading through the pass (Fremont 1845: 125). Rufus Sage in 1841 called this the "pass-trail" (Hafen and Hafen 1956:331). When Lt. Francis T. Bryan (1858:461-462) traveled through the pass in 1856, he described an Indian trail along the right (north) bank of Pass Creek, a very rough wagon road above Pass Creek on the north, and a pack trail that avoided Pass Creek Canyon. This pack trail was probably the one Willing Richardson, an early rancher from the Elk Mountain area, described as the "Cherokee Pack Trail" which crossed Oberg Pass within the Forest boundaries (Richardson 1960). Richardson says an Indian battle was fought on the east side of the pass and that scattered beads were found there (Burns et al. 1955:564-569). Along the trail in this area is a rock alignment that Richardson calls an "Indian sign board" (see photo p.74). Sometime before the turn of the century it was interpreted for Richardson, presumably by an Indian, as giving route information and indicating the location of water. I

For further discussion of Indian trails and trail markers see Loendorf and Brownell (1980:11-83).

The Parkman/Oglala Sioux Route

There are at least two interpretations of the route that Francis Parkman traveled with a band of Sioux in 1846 (Neal 1976; Cobb 1979). While substantially different, both versions indicate that Parkman crossed a section of the Laramie Range in the Medicine Bow National Forest on both the outward trip from Ft. Laramie and the return. Both versions also mention the gathering of lodgepoles on the west slope of the Laramie Range in areas most likely within the Forest.

Chuck Neal's route goes up Spring Creek to a saddle between Sheep Mountain and Chimney Rock. From there it drops down to the North Laramie River and proceeds upstream to Sturgeon Creek and then to the Laramie Plains.

On the return trip Neal places one of the Indian camps along Cow Creek (Sec.7-T25N-R73W), outside the Forest. From there the Sioux traveled into the mountains to gather lodgepoles. Neal has nominated to the National Register of Historic Places the portion of upper Cow Creek that lies within the Forest. The only ethnohistoric information on this area is that Indian Peak was named in the 1860's by early settlers for an old Indian camp in the vicinity (Emery 1940:37).

In recrossing the Laramie Range, Neal believes the Indians traveled across the divide between Ashley and Owen Creeks, then eastward across Wheeler Flats. They then descended by way of the old Red Rock Trail.

Neal (1976) placed three camps within the Forest boundaries. One camp was along the North Laramie River (Sec.29-T26N-R70W), another was at the confluence of Sturgeon Creek and the North Laramie River (present site of the Double Four Ranch), and the third was east of Britania Peak at the head of the Laramie River.

Parkman's route was also retraced by Harrison Cobb (1979). The outward trail ascended Slate Creek and then followed Bluegrass Creek. One camp was made where the 96 Ranch is now located. On the return journey, Cobb believes the Sioux cut lodgepoles on Bar-M Creek and then crossed Davidson Flats. They then descended McFarlane and Ashley Creeks, went up Joe Miller Draw, and then down Rabbit Creek.

The only historic documentation of this trip are Parkman's journal and the Oregon Trail, which he based on his experiences recorded in the journal. The geographic information in both is imprecise and sometimes contradictory, allowing various interpretations of where events in the book took place. Ethnographic information is even less helpful. While there are several known Indian routes across the Laramie Range, none are definitely associated with the Oglala Sioux, and it is probable they used many routes over the mountains. Locating Parkman's route archeologically would be even more difficult. Even large, well-documented encampments have proven difficult to locate on the basis of artifactual remains. The Cow Creek area may prove in the future to be an interesting area archeologically, but it has not been satisfactorily demonstrated that this was the area used by Parkman and the band of Oglala Sioux.

Parkman's journey, though, has high interpretive value. While the specific route he took is arguable, it seems likely he did travel and possibly camp within the Forest boundaries. Until futher information is available, the Parkman/Oglala Sioux journey lends itself to more accurate interpretation as an historic event rather than a specific, historic location.

Other Trails

With information provided by Eagle Head, an Arapaho, Lt. Bryan followed an Indian trail up the ridge between the north and south forks of Lodgepole Creek (Bryan 1858:459). The route he took passed through a section of the present Medicine Bow National Forest in the Pole Mountain area.

Ben Holladay, owner of the Overland Stage Company, relocated the stage line to the Medicine Bow region in 1862 because of protracted Sioux raids along the old route on the North Platte. He had traveled through the Medicine Bow region in 1850 when the only route through the area was 250 miles of "Indian lodgepole trail" (Holladay 1880).

According to Dr. Florence Patrick and Robert Garrett, both early residents of Garrett, Wyoming, Arapaho Creek in the Laramie Peak District was named in the 1860's by the early settlers for the Indians who traveled from the lower to upper plains along this route (Emery 1940:7-8). A section of this route is still known as the Arapaho Trail. Virginia Trenholm (1970:202) mentions an Arapaho trail crossing the Laramie Range through Halleck Canyon, and Rufus Sage followed an Indian trail from the head of Sybille Creek down to the Laramie River (Hafen and Hafen 1956). Neither of these trails, though, cross the Forest.

Conical Timber Lodge

What appears to be a conical timber lodge was reported on Elkhorn Creek, SW/NE/NE Sec.14-T12N-R80W, by Paul J. McKillip (1980), Recreation Staff Officer (see photo p.73). Similar structures have been found in North Park (Johnson 1972:93; Payne 1965:92), on Green Mountain near Rawlins (Frison 1978: 62), and in the Big Horn Mountains (Frison 1978:75). They are often called war lodges since they were used as temporary shelter for war parties (Ewers 1968:117). A detailed description of their use and construction is provided by Ewers (1968) based on Blackfoot Indian accounts. The use among the Utes of conical timber lodges, referred to as summer lodges and standing wickiups, has been described by Lowie (1924:220) and Buckles (1968:62).

Timber lodges were usually, but not always, self-supporting, and the war lodges were usually constructed in heavily timbered areas. The one on Elkhorn Creek is built around a standing tree and in an open area. This may indicate it was used for a purpose other than war. This site should be field checked for confirmation and recorded. If it is determined to be an actual timber lodge it will be the only known Indian structure still standing in the Forest, and its research significance and potential interpretive value would be high.

Warfare

The largest recorded battle in the region was at Fraeb's fort, usually reported to have taken place at the junction of Battle Creek and the Little Snake River (Hafen 1929:100). Fraeb and several trappers were killed there along with a number of Sioux, Cheyenne, and Arapaho (Trenholm 1970).

According to Clarence Tupper, a tie-hack who had worked on the construction of the Snowy Range Lodge, an Indian raid was directed against an early camp called Silver City situated where the lodge now stands. At least one person was killed (David Egolf 1981, personal communication).

Thomas and Robert Garrett of Garrett, Wyoming reported that Indian Creek, in the Laramie Peak District, was named for an Indian raid on a wagon train along the Old Fort Fetterman Road near the point where it crossed the creek (Emery 1940:36-37).

In 1869 Indians attacked a wagon train escort near Laramie Peak killing one soldier and wounding another, and in 1874 two soldiers were killed guarding the lumber train from the government sawmill near Laramie Peak (U.S. Army 1882:24,39). A trapper by the name of John Pullum, a member of the Bean-Sinclair party from Arkansas, was also reported killed by the Gros Ventre on what is probably Jack Creek some time before 1844 (Fremont 1845:281; Carter 1968:95).

There is also a report of an Indian battle on the east side of Oberg Pass (see Cherokee Trail discussion), and a battle between the Sioux and Ute in 1856 on Pass Creek (Medicine Bow Forest Collection Box 5). Parkman also mentions a fight between the Sioux and Shoshone (possibly Ute) in the Medicine Bow Mountains (Parkman 1849).

Paleo-Indian

There is a general reference from the Medicine Bow National Forest files to Folsom points found on Jack Creek (Medicine Bow Forest Collection, Box 5: 1940). Several Paleo-Indian sites have also been reported from areas adjacent to the Forest. Folsom points were unearthed at the Wagoner Ranch, (Sec.7-T16N-R86W) and sixteen Yuma points (sketch shows parallel oblique flaking) and "modern points" came from a blowout area two feet beneath the surface in Sec.2-T16N-R88W (Medicine Bow Forest Collection Box 1:1951).

Miscellaneous

A large prehistoric camp containing primary reduction flakes of chalcedony was reported in the N/NE/SW Sec.9-T12N-R84W, and a number of stone circles in the NE/NE Sec.35-T15N-R87W (Richard Cerise 1981, personal communication). In the Centennial District Multiple Use Plan for 1963 there is mention of "Indian artifacts and signs" found on Sheep and Table mountains and near the Centennial Ranger Station (USFS 1963).

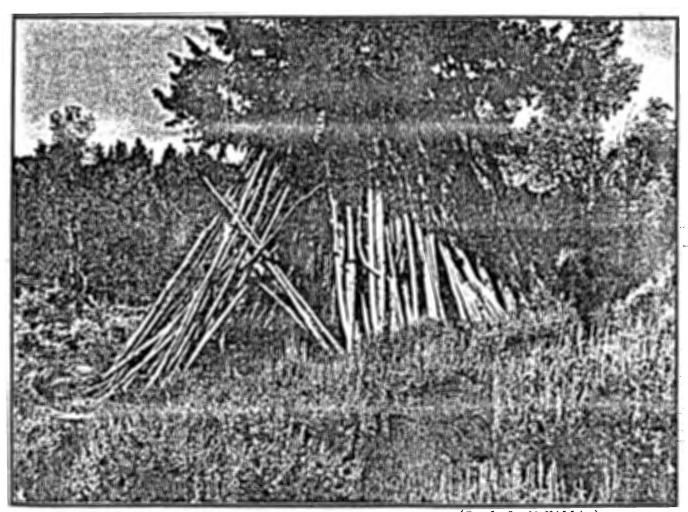
The Arapaho are reported to have driven game through a gap known as the "the Door" where hunters were stationed to kill the animals as they ran through (Toll 1962:20). This was said to be where the North Platte "crosses the Medicine Bow Range," and is probably located somewhere in North Gate Canyon. Fremont (1845:30) came across a recently abandoned Arapaho village in this area in 1844. A clay used for blue paint by the Arapaho was also obtained in the vicinity.

Indian burials and other artifacts are reported in the area where Fox Creek joins the Big Laramie (Medicine Bow Forest Collection, Box 5:1953). These graves are said to be on the Erickson Ranch on the ridge above where the old water wheel stood (Medicine Bow Forest Collection, Box 5:1923). Crismore, who ran the lodge at Sand Lake, had a large artifact collection from that area and found numerous buffalo skulls on the Medicine Bow River near Sand Lake (Medicine Bow Forest Collection, Box 5:1953). A ranger from the old Centennial District reported an Indian camp near Hardigan's ranch at Porter Lake and several Indian graves on the first hill west of the Lake. These were reportedly shallow and rock-covered. He also mentions the old rock-Dixon Ranch area on the east fork of Dutton Creek as being a fertile area for "Indian relics" (Medicine Bow Forest Collection, Box 5:1956). Winfred S. Prouty is reported to have found an "arrowhead factory" in the NE Sec.36--T14N-R78W. This was subsequently destroyed by railroad construction (Medicine Bow Forest Collection Box 5:1923). Archaic period projectile points have been picked up near Windy Hill in the E-1/2 Sec.12-T17N-R79W and at the section line between Sec.33 and Sec.34-T16N-R78W (Medicine Bow Forest Collection, Box 5).

There were also a number of oral reports too general to be included. They indicate prehistoric use in the lower portions of the Forest in the Centennial Valley area, the mountain passes between Elk Mountain in the north and Kennaday Peak in the south, the lower elevations in the northern portion of the Hayden District, and the lower country beneath Cottonwood Rim.

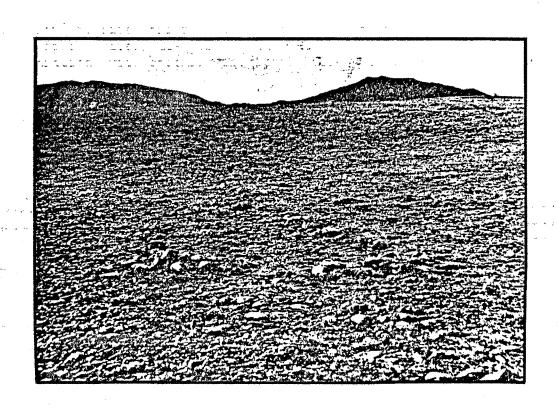
Lithic Sources

Coffin (1951) described a number of lithic sources supplying good quality material that may have been used prehistorically by people in the Medicine Bow region. Chalcedony and quartzite are found in the Upper Boxelder Basin in northern Colorado and southern Wyoming. Chalcedony, jasper, flint, and quartzite were reported to have been mined along the base of the Laramie Range and adjacent to other mountains of southern Wyoming. A carnelian form of chalcedony comes from near Rawlins, and quartzite and chalcedony are found on Specimen Mountain near Little Medicine, Wyoming. The well-known Spanish Diggings quartzite sources in the Hartville Uplift area of eastern Wyoming were actively quarried by prehistoric groups and may turn up on sites in the Forest.



(Paul J. McKillip)

A possible timber lodge on Elkhorn Creek, Medicine Bow National Forest. A number of timber lodges are also reported in North Park.



Trail marker on a branch of the Cherokee Trail, east of Oberg Pass. Willing Richardson Collection, American Heritage Center, University of Wyoming.

RESEARCH AND MANAGEMENT

There are major gaps in our knowledge and understanding of the cultural resources in both the Forest and the region. Some of these gaps have been the focus of problem-oriented research for some time, others involve the specific research needs of the Forest.

The settlement/subsistence pattern of Paleo-Indian groups is not well known. Was the focus primarily on big game exploitation, or was it a more diffused, broad-spectrum pattern? If more diffused, what place did the foothills and mountain environment hold in a broadened procurement strategy? What criteria can be used to identify upland Paleo-Indian sites?

The cultural dynamics of the transition between the Paleo-Indian Period and the Archaic are still not well understood. Was the change gradual or quick? What role did the high country play in this period of transition?

The human response to the Altithermal is the focus of continuing research. It appears the mountainous areas of the region may play an important role in understanding these adaptive processes. Criteria for identifying Early Plains Archaic sites for the Forest should be developed.

The exact nature of the high country adaptation that have been proposed by a number of researchers is unknown. When did man first start using the high country and why? What degree of continuity, through time and space, does this particular adaptation represent? Was the archaic nature of this adaptation the source of an indigenous, region-wide response during the Plains Archaic periods, or did the Archaic period adaptive pattern diffuse from the Great Basin?

The nature and chronology of migrations through the region has puzzled researchers for some time. Of particular interest to mountain studies is the possibility of Athapaskan speakers using the uplands in their migration south (Perry 1980). Is there evidence for this in the mountains of southern Wyoming? An important aspect of Wright's (1978) theory of Shoshonean migrations is his belief that the Shoshone did not begin using the high country until around 1800. A recent study in the Alta Toquima Range of Nevada may contain evidence of a much earlier, high elevation site used by the Shoshone (Riley 1981). Did the Shoshone use the mountains of southern Wyoming? If so, at what date?

Of major archeological concern for the Forest is the development of a chronological sequence of prehistoric cultural traditions in the region. While good chronologies exist for the plains and intermountain basins, their applicability to the high country is unknown.

A number of other research questions are focused more specifically on the Forest:

- 1. What is the density of cultural resources in various areas of the Forest?
- 2. How are sites distributed in regard to environmental factors—slope, aspect, water, elevation, local topography? Are there direct associations with specific lithic and plant resources?
- 3. Do sites exhibit seasonality of food procurement?
- 4. Do sites at different elevations represent different forms or intensities of exploitation?
- 5. Are there certain areas, or geomorphic conditions, where sites in the Forest are better preserved?
- 6. Did a mountain adaptation exist in the past or was use of the Forest primarily a specialized exploitation by plains and intermountain basin oriented groups?
 - 7. Is a predictive model based on vegetative diversity useful for locating cultural resources in areas of high topographic relief where within a short distance most areas will exhibit horizontal or vertical vegetative diversity? This form of model seems tautological: in the mountains, sites are found in areas of vegetative diversity, so areas of vegetative diversity will produce sites. If vegetative diversity is a criterion of site selection, how much diversity was optimal for hunting/gathering groups?
 - 8. What types and densities of sites can be expected in forested areas or on steep slopes?
 - 9. What is the time-depth in the area for the historic Shoshone and Ute?
 - 10. Is the current site inventory representative of the cultural resources in the Forest? If so, does it represent ephemeral, specialized use, low population density, or other forms of utilization? If ephemeral use, why didn't a mountain adaptation develop in this area? If low population density, why? If the low number of sites is not representative of past utilization of the Forest, why have greater numbers not been found?

SIGNIFICANCE

The interpretation of significance under the eligibility criteria of the National Register of Historic Places (36CFR60.6) is a major concern of cultural resource managers. Those resources that are determined to be significant,

and therefore eligible for the NRHP, legally must be preserved or adverse impacts to them must be mitigated by comprehensive excavation. In those areas where impact is imminent, a determination that a site is not significant will usually result in the destruction of the cultural resource. The decisions being made by cultural resource managers today are directly affecting the future research value of the archeological record and the kinds of cultural resources that will be preserved for future generations.

For prehistoric cultural resources the single most important category of the eligibility requirements for the NRHP is the determination of whether or not a site has the potential to yield important information. In determining the research value of a cultural resource, consideration must be given to what research value the site might hold for the future. With constantly changing research goals and theoretical concerns, the future value of a site cannot be predicted. Ten years ago the type of prehistoric site presently most common in the Forest - small lithic scatters without apparent depth of deposition, would have been considered insignificant and possibly not even recorded. With an increased interest in patterns of settlement and subsistence and the relationship of these to environmental factors, small, low density sites are now considered an indispensible part of the archeological record. If a cultural resource is considered insignificant on the basis of current research interests or speculation on what may be significant tomorrow, important segments of the archeological record may be permanently destroyed. Even disturbed sites have proven valuable sources of archeological information (Talmage and Chester 1977). A region-wide Forest Service research design or state-wide historic preservation plan will help in determining national, state, and local significance for the present, but cannot accurately anticipate what may be considered significant in the future.

All prehistoric cultural resources in the Medicine Bow National Forest should be considered potentially significant. Unless proven otherwise, all prehistoric cultural resources should be considered potentially eligible for the NRHP. Impact to these sites should be avoided, or their information content preserved through mitigative measures.

MANAGEMENT

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The site inventory is an important aspect of a cultural resource management program. The Secretary of Agriculture has directed the Forest Service to complete the inventory of all locateable cultural resources by 1990. This directive poses certain problems for areas like the Medicine Bow National Forest that have what appear to be a low number of recorded prehistoric sites. An important consideration for a cultural resource inventory program in the Forest is to first determine if this low number of sites accurately reflects actual prehistoric utilization, or whether the current inventory is an unrepresentative sample.

A light use of the area prehistorically would seem to fit the historic Indian patterns of use. But these tribes were primarily plains and basin oriented

groups. A prehistoric pattern of light use would also conflict with what is known of prehistoric occupation from the mountains of northern Wyoming and the Colorado Front Range. These areas seem to have supported fairly intense occupation of the high country, at least periodically. Reported sites in the Forest, while not substantiated, also indicate a more intensive use, but to what extent cannot be determined without field checks.

The effects of erosion and deposition on sites should be considered. This may be an important factor in site detection. Also, historic human disturbance may have contributed to the destruction of sites. The technique of floating ties by surge-flooding, which was used on many of the creeks of the Forest in the past, may have destroyed many prehistoric floodplain sites.

There is also the possibility that a representative sample of sites is not being detected during the field surveys. A critique of past survey methodology, together with a good self-assessment, can be found in the archeological survey report for the 1980 field season (Fawcett and Francis 1981). There is an encouraging pattern of increased site detection over the years, attributed to the use of formal survey methodology. But there has been little attention to a reoccurring problem—ground visibility. Increasing the sophistication of the sampling technique may not adequately increase the inventory, if sites are not being seen during the walk-over survey. The density of the vegetation cover and the build up of duff have obscured the surface in many areas. Techniques should be developed, experimented with, or adapted from other forested areas in order to overcome this problem. Increased use of shovel tests, troweling through the duff to mineral soil in selected areas, and increased attention to areas of disturbance, especially roads, trails, and the root systems of windfall trees, may help.

A straight-forward training program for Forest Service field personnel could also be implemented to encourage the identifying and reporting of cultural resources. A program to enlist the aid of the public in reporting sites might also be undertaken. In addition, the inventory process could be aided by the refinement of a stratified sampling methodology, tailored to the Forest environments. This would help ensure a more accurate predictive model for prehistoric site detection.

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INTERPRETIVE SUMMARY

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The history of the Medicine Bow National Forest stretches back 8500 years. Yet, the only prehistoric record for this length of time is contained in 35 sites scattered across a wide area of forest and mountains. The first people known to have entered the Forest had a unique style of making stone knives and lancelote points known as the Cody Complex. Similar tools have been found at mass kill sites on the plains mixed with thick layers of buffalo bone. These people were herd hunters which required close cooperation, at least during the buffalo hunting season. In order to control the direction of a buffalo herd's flight, it was neccessary to effectively orchestrate the level of fear in the herd. This involved a fairly large number of people working closely together. A herd might be driven up an arroyo without an exit or into the loose sand of a steep dune where the buffalo could be more easily killed. The plains and intermountain basins may not have supplied the needs of these hunters consistently. They may have been so effective that the herds were thinned periodically below the point where they could be properly driven, or a drier cycle of weather may have done the same. From the evidence recovered in the high country, they must have occasionally left the plains and basins, but for what reasons and for how long are not fully understood.

For most of the mountainous areas of the region, the evidence of human occupation begins to increase as a major climatic shift known as the Altithermal made itself felt. During this warmer, drier cycle, evidence of people in the short-grass plains at a distance from the mountains is almost non-existent. At the same time, human activity in the mountainous areas was increasing. A style of living began to develop which was less focused on a single animal like the buffalo. The tool styles from this period are found in smaller geographic areas than earlier forms and are often made from local, poorer quality material. People seem to have settled into a smaller range of country which they used more intensively.

During an exceptionally dry peak of this period, a group of people migrated into the Colorado Front Range. But where they came from is unknown. They constructed a series of drivelines across the high tundra ridges and began trapping mountain sheep during the summer. In winter they moved down to the foothills. The mountain foothills of northern Wyoming were also the winter base for other mountain sheep hunters, but there is no evidence of their using drivelines or traps during this period.

In the mountains of southern Wyoming, the archeological record for this period is, so far, missing. It was not until the seasons began to turn cooler and wetter that remains of people in the higher elevations of the Forest are again found. The plains and intermountain basins also began to be reoccupied at this time, which may have coincided with renewed productivity of the

shortgrass plains and an upswing in the numbers of buffalo.

It is not known if these shifts in climate, together with the population fluctuations throughout North America, were gradual or quick. When a way of living is fine-tuned to the seasons even a gradual shift of a few degrees in temperature or an inch or two of rain will make itself felt, and major changes in human cultures can occur. Some researchers believe these changes were quicker, harder, and shorter than previously suspected. This would have caused a greater disruption among the groups of people living in the region.

While other mountainous areas have produced evidence that people developed a specialized way of living tailored to the wide variety of plants and animals found there, the recorded sites in the Forest are too few to give a clear indication of the subsistence patterns. The Forest may have been used only as an occasional refuge during periodic fluctuations in the buffalo herds, or there may have been a few, scattered bands of people maintaining a high country way of life that left little in the way of archeological remains. Whatever reasons brought people to the higher elevations, they would use the area to hunt game and probably gather plants. But during what seasons of the year and how often they returned is not known. There is yet no indication that the number of people or the intensity of use in the Forest increased during any certain period. But at least light use is indicated from Paleo-Indian times through the Historic Period, with the possible exception of the cultural period known as the Early Plains Archaic, which coincided with the warmer, drier climatic cycle. By historic times, reports indicate the lower areas of the region were being extensively used. Numerous tribes from widely scattered areas are reported to have hunted and raided in the region, which had a well-deserved reputation as dangerous country. hunting parties willing to expose themselves to the risk of enemy attack could take advantage of the abundant game. Since the early, written reports concerning the region came primarily from travelers who stayed in the lower country, little is known of the actual use historic tribes were making of There were also few recorded observations made during the the mountains. winter. Occasional mention of Indians hunting and gathering in the mountains, and war parties traveling through the region during winter are all that is recorded. The historic tribes using the area usually preferred to hunt the buffalo and were adjusted to life on the plains and intermountain basins, so their involvement in the high country was probably limited. The Utes and Shoshone made greater use of the mountains than others, but this may have been more a defensive measure than economic adaptation. prehistoric cultural dynamics of the Medicine Bow National Forest are perhaps the least known in the region. But the potential for contributing significant information on the cultural history of the area is great. active Forest Service cultural resource program can play an important role in protecting known resources, locating unrecorded ones, and encouraging future research, especially on problems oriented to the high country of the Forest.

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THE MEDICINE BOW NATIONAL FOREST

BY

Robert G. Rosenberg Elizabeth L. Rosenberg

HISTORIC SETTING

EARLY EXPLORATIONS

Although no actual evidence exists of direct Spanish contact within present day Wyoming, historians have continued to speculate on this possibility due to the proximity of documented expeditions in Colorado, Nebraska, and Utah. C.G. Coutant discusses the possibility of Spanish Exploration in his History of Wyoming (1899:23-32). He admits that the evidence is inconclusive, and urges other historians to pursue the subject further. Coutant mentions ruins of stone dwellings near Lake DeSmet (north of present day Buffalo) found by the Connor expedition in 1865 which were judged to be over 100 years old at the time of their discovery. A stone arrastre (for crushing ore) was found in 1866 about 50 miles southwest of Ft. Phil Kearney. Harry Mullison, a ranger on the early Medicine Bow National Forest, has an intriguing account of early mining evidence in what is now Mullison Park. Mullison noted the remains in 1870 and judged one to be at least 175 years old at that time (see section on Mining).

The French trappers penetrated into what is now Wyoming, although much controversy surrounds names and dates. Francis Beard shows a French map made in 1720 which is supposed to depict the Laramie and Medicine Bow Mountains and the Laramie Plains (Beard 1933:2; Homsher 1949:1).

The first Euro-Americans in the region may have been a small trapping party led by Ezekiel Williams in 1807 or 1808. Working for Manuel Lisa near the headwaters of the Yellowstone, the party was driven south by the Blackfeet. A few survivors came into the study area, crossed the Snowy Range and continued into Colorado (Coutant 1899:70-73). Another version states that Williams followed the North Platte to its source in North Park in 1810 or 1811 (Homsher 1949:3-4).

Jacque Laramie (La Rameè, La Ramie) whose name has been liberally used throughout the region, is reported to have trapped in the study area in 1817. He was killed in 1820 or 1821 after setting out by himself to trap along the Laramie River (Homsher 1949:4). Exact movements of various trapping parties are difficult to chronicle as the evidence is scant and often unreliable. Few mountain men were literate or predisposed to write accounts of their adventures. Stories passed by word of mouth and were often greatly enhanced to highlight the exploits of the particular storyteller.

In 1824 and 1825, General William Ashley led an expedition of trappers up the South Platte River to the vicinity of present day Ft. Collins. He travelled northward across the Laramie Range onto the Laramie Plains and proceeded along the east base of the Medicine Bow Range, attempting to find

a westward crossing. The month of March was not advantageous to a successful crossing and

...after an uremitting and severe labour of two days, we returned to our old encampment with the loss of some of my horses, and my men excessively fatigued. We found the snow to be from three to five feet in depth and so firmly settled as to render our passage through it wholly impracticable (Dale 1918:129).

This unsuccessful crossing may have been attempted by way of the Little Laramie River. Ashley then proceeded around the north end of the Medicine Bow Mountains and Elk Mountain, thence northwest out of the study area.

Controversy surrounds a trapper named La Bonte who gained fame from George Frederick Ruxton's <u>Life in the Far West</u> (1847). He was one of the principal characters in this historical fictional account of trapping in the early west. Historians Leroy Hafen and Bernard DeVoto, however, did not think La Bonte ever actually existed. La Bonte Creek and "La Bonte Camp" are mentioned in early accounts. The names La Bonte and David La Bonte also appear in traders' correspondence. It is fairly certain that there was a La Bonte Camp near the confluence of the North Platte River and La Bonte Creek, but there is not enough evidence at this time to sketch in any details about the trapper La Bonte (Homsher 1949:5-6; Leonard 1972:1-26).

In 1843, the "Pathfinder", John C. Fremont of the Corps of Topographical Engineers, followed Ashley's general route through the study area. Guided by Tom Fitzpatrick and later accompanied by Kit Carson, Fremont set out with 39 seasoned "Creole and Canadian voyageurs", a train of 12 carts, 1 light wagon and a 12-pound howitzer. A year earlier, Fremont had proceeded up the South Platte to Ft. St. Vrain, then travelled north to Fort Laramie along the east base of the Front Range and the Laramie mountains. In 1843 he attempted to penetrate the Front Range and find a suitable passage westward for emigrant travel. It is interesting to note how few men were familiar with this particular area at this relatively late date. Fremont explains:

It is singular that, immediately at the foot of the mountains, I could find no one sufficienty acquainted with them to guide us to the plains at their western base; but the race of trappers, who formerly lived in their recesses, has almost entirely disappeared—dwindled to a few scattered individuals—some one or two of whom are regularly killed in the course of each year by the Indians (Fremont 1845:120).

Fremont had to employ the service of Alexis Godoy even though he had two of the most famous mountain men (Carson and Fitzpatrick) already in his party. They attempted to follow the Cache La Poudre River upstream but eventually headed northward through mountains and foothills to enter the Laramie Plains from the west. They camped on the Laramie River July 31st, and travelled across the Laramie Plains along the east base of the Medicine Bow Mountains. They camped on the Medicine Bow River on August 2nd near "Medicine Butte" (Elk Mountain), passed to the south of Elk Mountain, crossed the North Platte

River and then proceeded in a northwesterly direction to the Sweetwater River and South Pass (Fremont 1845:125-127).

In 1844, Fremont once again entered the study area from the west on his return from California. He followed the Elkhead (Little Snake) River and St. Vrain's Fork (Savery Creek) into the southwest portion of the Sierra Madre Mountains. He came within a short distance of the site of the Fraeb battle in 1841 (discussed below). He may have ascended Battle Creek, but at any rate reached the divide and descended a stream he called "Pullam's Fork", named after a trapper killed there by Gros Ventres Indians. He reached the North Platte River and turned southward traveling through the three mountain parks of Colorado (Fremont 1845:281).

Fremont's chief contribution was to conscientiously record and map his travels. This information was used for many years by those who followed. He also tapped the memories of the remaining fur trappers and recorded their information for posterity. As Goetzmann states, "This was one difficulty with the specialized geographical knowledge which the mountain man possessed: it could die with him" (Goetzmann 1960:89).

In 1837 or 1838, Henry Fraeb (also Frapp or Frappe) and Jim Bridger built a trading post on St. Vrain's Fork (Savery Creek) in the foothills of the Sierra Madres. Apparently this general region was not often trapped by the mountain men until the late 1830's, because it was heavily used by the Indians. Fraeb was an experienced mountain man and had been a partner in the Rocky Mountain Fur Company. He then went into business with Peter Sarpy and built Ft. Jackson on the South Platte River. In 1841 Bridger was building the fort that would bear his name on Black's Fork and became concerned about Fraeb. He dispatched a search party that included Jim Baker.

Fraeb, meanwhile, was on a buffalo hunt and received news of an attack on a party of trappers near Five Buttes resulting in the deaths of two trappers and the loss of 100 head of horses.

Two weeks after receiving news of the action at Five Buttes, and after Baker's arrival, Fraeb encountered a large group of Indians. He sought protection in the log fortifications he had built on the north bank of the Little Snake River near Battle Mountain (formerly known as Bastion Mountain). This locality was near Battle Creek and Squaw Mountain (Sec.13-T12N-R88W) all subsequently named for the fight which ensued. The battle lasted several hours and resulted in Fraeb's death and that of seven or eight trappers. An estimated 40 Indians were killed or wounded (Barnhart 1969:36-37; Stansbury 1853:239-240).

STANSBURY EXPEDITION

Portions of what would become the Overland Trail had been traversed by Ashley (1825) and Fremont (1843). Additionally, at least two emigrant parties had crossed in 1849. The Evans party, led by Captain Lewis Evans of Arkansas, was composed of a group of Cherokees either heading for the California gold

fields or attempting to find new lands on which to settle. The same year the Jones party crossed in the same vicinity, but no details are available. However, the value of this route as a possible alternative to the more northerly Oregon Trail was first officially recognized in 1850 by Captain Howard Stansbury of the Corps of Topographical Engineers. Stansbury, upon completion of an exploration and survey of the Salt Lake Valley, stated:

It has been determined not to return by the beaten track, but to endeavor to ascertain the practica-bility of some more direct route than now travelled to the waters of the Atlantic. If it should prove to be practicable to carry a road across the north fork of the Platte, near the Medicine Bow Butte [Elk Mountain], and, skirting the southern limit of the Laramie Plains, to cross the Black Hills [Laramie Range] in the vicinity of the heads of Lodge-pole Creek, and to descend that stream to its junction with the South Fork of the Platte, nearly a straight line would thus be accomplished from Fort Bridger (Stansbury 1853: 229).

Guided by James Bridger, Stansbury cut almost directly east from Fort Bridger on September 10, ascended Bitter Creek, and crossed Haystack Flats and the southern Red Desert region. Stansbury continued over Bridger's Pass (just north of the study area in the Sierra Madres), crossed the North Platte and stayed north of Medicine Bow Butte (Elk Mountain), whereas Fremont had turned south. He entered and crossed the Laramie Plains where he encountered a camp of Sioux and Cheyenne consisting of nearly one hundred lodges (Stansbury 1853:252-255). Bridger was well known to the Indians, and they camped peacefully within two miles of the village.

Stansbury attempted to cross the Laramie Mountains, but when he reached the crest and surveyed the route down Lodgepole Creek, it appeared too steep and heavily forested to use. Stansbury thought the range was more gentle to the south and would provide a better crossing point. He proceeded south-southeast, slowly descending until he struck a branch of Crow Creek. Stansbury apparently wandered among the hills for the rest of his descent of the east side of the range until he picked up another branch of Crow Creek and reached the plains. He then turned north to reach Lodgepole Creek, which he intended to follow east to the forks of the Platte. He passed through "Cheyenne Pass" which he described as a depression about four miles wide between the Laramie range on the west and a plateau on the east. He finally reached Lodgepole Creek but an injury prevented him from exploring it, and he was forced to seek aid at Fort Laramie (Stansbury 1853:259-261).

Stansbury felt that this new route was feasible for wagon emigration and would save approximately 61 miles between Fort Laramie and Fort Bridger. Eventually it was greatly utilized by emigrants; Ben Holladay realized its merits and in 1862 relocated the Overland Mail route on it this route.

BRYAN EXPEDITION

In 1856, Lt. F.T. Bryan was ordered to find a suitable wagon road from Ft. Riley, Kansas to the Salt Lake Valley utilizing Bridger's Pass. At this time, the federal government was concerned with what they considered the growing Morman problem and the possibility of open conflict. Bryan traveled west as far as Bridger's Pass to determine the feasibility of Stansbury's route for wagon travel. Bryan ascended Lodgepole Creek into the Laramie Range, staying on a ridge formed between the two branches of that creek. He describes it as "...exceedingly smooth and of a very gradual ascent, giving an excellent road" (U.S., Congress, Senate 1857:459). Bryan stated that he was following an Indian trail at this time and that they obtained fine, straight lodgepoles in this area. Bryan had some difficulty in the last mile and a half before reaching the summit but found the descent "easy and gradual". He improved the route by moving boulders and cutting some timber to allow wagon passage. Bryan should be given credit for establishing a suitable emigrant crossing of the Laramie Range along the Lodgepole Trail, even though Stansbury had been through the same general area and inititated the idea.

Bryan crossed the Laramie Plains and once again skirted the mountains to the north. He camped on what he called the west branch of the Medicine Bon (Bow) and commented that this stream was "famous as a trapping ground for beaver" (U.S., Congress, Senate 1857:461). Bryan followed Pass Creek through the gap between the main range and Elk Mountain. At this point, he indicated that he was following an existing road and an Indian trail.

Bryan explains the route along Pass Creek quite clearly and his description is worthy of being quoted at length:

Monday, August 11, 1856. -- Crossing the creek we followed an Indian trail leading down the right bank, until the hills came so close to the creek that we were obliged to take to the road again. This we had avoided as much as possible to-day, as it led over a succession of ascents and descents. Even after we entered the road again we were obliged, for about three miles, to make our way almost at right angles across the spurs coming down from the Medicine-Bon butte [Elk Mountain] on our right. In some places the road ran over side hills so steep that it was necessary to hold up the wagons with ropes. Two wagons here overturned in making the passage. This three or four miles through the canon of Pass Creek would require a good deal of work, a week's work for a company.... After leaving the canon the road is generally very good, being through a sage prairie, and over a hard, gravelly soil. We passed an emigrant's grave (Pickens') at a good camping place, where the road touches the creek... (U.S., Congress, Senate 1857:461-462).

It can be derived from this description that some kind of a road already existed, no matter how rough, and the description of the "emigrant" grave

suggests that the trail had received some use. This road was probably the route laid down by Cherokee emigrant parties starting in 1849.

In summary, the Lodgepole Trail appears to have been no more than an Indian trail over the Laramie Range in the Pole Mountain District. However, the Overland Trail had a least some segments that were described as a "road", probably as a result of Stansbury's expedition and light Cherokee emigration. Perhaps others used the route as well, but Bryan would not have been sent out to reconnoiter the route for wagon travel if it was already well established.

Finally, John Bartleson traveled eastward on the route in December 1857, under orders from Col. Albert S. Johnston to determine the feasibility of moving troops from Ft. Bridger to Ft. Laramie (U.S., Congress, Senate 1859), and Randolph B. Marcy, who later wrote an emigrant guide for the U.S. Government, also crossed the route in 1858.

OVERLAND TRAIL 1

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Ben Holladay was granted the federal mail contract in March 1862 and used the existing Oregon Trail as his route. However, Indian depredations led him to the decision that a move southward might alleviate the problem. He utilized the Stansbury route in the study area, constructed a string of stations, and began service on July 21, 1862. It was called the Overland Stage Line, and the route became known as the Overland Trail (Hafen 1926:232). The route left the Oregon Trail and followed the South Platte River past Julesburg. It then crossed the prairie of eastern Colorado to Latham (near Greeley), where it turned northwest and followed the Cache La Poudre River to Laporte (north of Ft. Collins). From Laporte it followed modern U.S. Route 287, crossing the Laramie Range to the Laramie Plains where it picked up the general route of Stansbury. It proceeded around the north end of the Medicine Bows to the north of Elk Mountain, crossed the North Platte River and the northern extreme of the Sierra Madres via Bridger pass to points west.

In the study area the following stage stations were established (from east to west): Big Laramie, Little Laramie, Cooper Creek, Rock Creek, Medicine Bow, Elk Mountain, Pass Creek, North Platte, Sage Creek, Pine Grove, Bridger's Pass, and Sulphur Springs.

Stage stations were located at ten to fifteen mile intervals. Teams were changed at the "swing" stations, but no services were provided for passengers. The swing stations consisted simply of a stable and granary with small adjoining living quarters for the stock tenders. Two men generally manned each of these stations. A fresh team in harness was ready for the arrival

¹The following discussion is a condensed version of what originally appeared as part of the <u>History of the Red Desert</u> (Rosenberg and Kvietok 1981).

of the stage, and could be changed in about fifteen minutes while passengers stretched their legs. The "home" stations, at 50-mile intervals were more elaborate. Meals were provided for passengers and drivers were changed. Telegraph communications were established between the stations. In periods of Indian peril, personnel with their stock from the intervening swing stations often sought protection at the home stations.

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Stages were driven day and night, and two 40 minute stops were made for meals. The system of swing and home stations enabled a passenger to travel between 100 and 125 miles in a 24-hour period (under ideal conditions). Holladay charged passengers (as of 1866) \$150 between Atchison and Denver, \$300 to Salt Lake City, \$450 to Nevada, and \$500 to California (Rusling 1875:41-42).

In moving south, Holladay did avoid serious Indian troubles until 1865, although the summer of 1863 brought several raids. In retaliation for the Chivington Massacre at Sand Creek, Colorado, Cheyenne allied with Sioux and Arapahoe raided Julesburg, Colorado, a major station and small settlement along the Overland Trail. Seventy-five miles of trail on either side were devastated. Several stage station operators, soldiers and emigrants were killed along the Overland Trail that summer, and several stations were burned. The portion of the route in the study area was considered the most dangerous. As Robert Spotswood testified before the Senate in 1878: "...whenever a man left Virginia Dale and started on that break he was in danger of his life, for an Indian was likely to jump up from behind a bush at any point and shoot him down" (U.S., Congress, Senate 1880:47). Although hostilities slackened in 1866, the year 1867 saw more depredations along the Overland as a result of the Fetterman Massacre of December 21, 1866 and Red Cloud's war in the Powder River Basin (see Thunder Basin overview).

The Peace Commission of 1867 met with the hostile Indians for 15 months and secured the relinquishment of the major Overland routes. More important, the Union Pacific Railroad had reached present-day Wyoming in 1867, and viewed as a larger threat, diverted the Indians' attention (Hafen 1926:322).

With the driving of the golden spike at Ogden on May 10, 1869, the Overland stage era was effectively ended, although emigrants continued to use the route for an undocumented period of time. This route has not received the notoriety of the Oregon Trail to the north, and its use as an emigrant trail has not been well recognized or recorded. However, Dr. J.H. Finfrock, post surgeon at Fort Halleck (near Elk Mountain on the Overland) recorded the passing of 17,584 emigrants and 50,000 head of livestock in the year 1864 (Barnhart 1969:64), indicating that the Overland Trail was well used by emigrants. With Holladay's stage system in operation, the traveler was assured of at least limited military protection and regular water/aid stops at the stage stations.

EARLY SETTLEMENT AND POLITICAL BOUNDARIES

Prior to the building of the first transcontinental railroad, the Overland Trail and its stage stations represented the main Euro-American presence in the study area. However, this was a rather tenous chain which was often broken by Indian attack. Protection was offered to travelers by the military presence at Ft. Halleck and by roving detachments.

In 1866, Ft. Sanders (originally called Ft. John Buford) was constructed on the Laramie Plains (near present day Laramie) by Captain Henry R. Mizner. Built from the lumber of Ft. Halleck which was abandoned at the same time, it was located on the Laramie River near the Overland Stage route and the Lodgepole Trail and provided protection for both, being about six miles from the former and one mile from the latter. The soldiers stationed at Ft. Sanders, the stage station operators, and "a handful of people" were the only inhabitants in the region at this time (Homsher 1949:13-14).

Politically, the region was still a part of the unorganized portion of the Louisiana Purchase (1803). In 1834 it was officially labelled Indian Country, being outside any organized territory or state. It was administered by the Commissioner of Indian Affairs under the War Department. It retained this status until 1854 when it a became part of Nebraska Territory, thence Idaho Territory in 1863, and Dakota Territory in 1864. Finally, on July 25, 1868, it became the Territory of Wyoming (Barnhart 1969:5-6; Homsher 1949:17-18).

THE UNION PACIFIC

The Union Pacific Railroad was the chief catalyst in opening the study area to settlement and exploitation. It is interesting to speculate how the opening of this region may have been retarded if a different right-of-way had been chosen. As it was, early settlement patterns for the entire region were determined by one man, Grenville M. Dodge, the chief engineer for the Union Pacific Railroad Company. An interesting feature of the building of the Union Pacific was its construction through undeveloped country. Farther east, railroad systems developed between existing large population centers as the need arose. The result of the railroad construction in Wyoming was that early settlement, coal mining, commerce and ranching clustered along the right-of-way.

General Dodge had inspected the Laramie Mountains on his return from the Powder River expedition in 1865 to determine the feasibility of a railroad route through the area. Leaving his troops on the east side of the Laramie Range, he explored crossings which a railroad might negotiate. He followed Lodgepole Creek to the summit and turned south where he encountered a party of Indians. He was forced to stay on the crest until rescued by his troops. On his return to camp, he inadvertantly found the approach he had been searching for (Dodge 1910:16-17; Homsher 1949:30-31).

When he became chief engineer in 1866, he rejected a southern route through

Colorado as well as a more northerly route along the Oregon Trail. Although the northern route may have been gentler and better watered, it was more frequently subject to Indian attack, was somewhat longer, and did not have coal reserves that were already known to exist along the central route. The central route was approved on November 23, 1866 (Homsber 1949:31).

Dodge was beset with engineering and logistical problems in addition to Indian attacks. There were power struggles with one of the directors of the company, Thomas Duran, who attempted to get Dodge replaced, as well as temporal pressures created by competition with the Central Pacific.

In the vicinity of what is now the Pole Mountain Division of the Laramie District, Dodge had to bridge the chasm over Dale Creek before descending to the Laramie Plains. This involved building a tremendous wooden trestle 126 ft high and about 720 ft in length, an engineering feat in 1867. The small community of Dale City grew up nearby to house the workers who constructed the bridge (Homsher 1949:34).

The following stations were established as the line advanced westward: Buford, Sherman (which acted as a repair shop and freight staion), Dale City, Red Butte, Laramie City, Cooper Lake, Lookout, Miser, Rock Creek, and Como (Homsher 1949:34).

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In 1867, Indian attacks and raids were common. Striking from Lodgepole Creek, the Indians harassed work crews by pulling up survey stakes and running off stock. In escalating violence, a railroad party was attacked and killed on the Laramie Plains. Another party lost a soldier and a tie hauler. In April, 1868, a work party was audaciously attacked only four miles west of Ft. Saunders; one man was killed and four were wounded (Homsher 1949:32-33).

Laramie City was established in May 1868 and Albany County was formed the following December. The permanence of Laramie was assured when it was chosen as the major railway division point and extensive machine and repair shops were built.

The impact of the Union Pacific on the settlement of the region was great. It provided the connections with markets to the east vital to ranching development. It created the lumber industry of the Medicine Bow National Forest by becoming the major market for railroad ties. The Union Pacific also bought and transported mine props for use in the coal mines managed by the Union Pacific Coal Company. This reliance on the business of the Union Pacific is detailed in the section on lumbering.

ADMINISTRATIVE HISTORY

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Medicine Bow National Forest originated on May 22, 1902 with the establishment of the Medicine Bow Forest Reserve. The original boundaries encompassed about 2,000,000 acres of the Medicine Bow or Snowy Range. The east and west boundaries approximated those of the present Laramie and Brush Creek Districts; the northern boundary was south of the present one, and the southern boundary extended south into Colorado to the area around Estes Park (Bruce 1959:1).

In 1908, the forest was divided. The Colorado section was named the Medicine Bow Forest; the Wyoming section, including Crow Creek Forest Reserve (est. 1900) was named the Cheyenne National Forest. Two years later, the Colorado portion became known as the Colorado National Forest, and the Cheyenne National Forest became the Medicine Bow National Forest (Coughlin's Historical Notes; Medicine Bow Collection, Box 30). This land represents about 2/5 of the Medicine Bow National Forest today. In 1906, Forest Assistant Arthur Ringland conducted a reconnaissance of the boundaries, concentrating on the northern end of the Forest. Approximately 221,280 acres of the northern Medicine Bow Range were added to the Forest on March 2, 1907 (Bruce 1959:11). In 1924, further boundary changes were made. Based on a survey conducted in 1909, some lands were eliminated, others added. An addition of 28,818 acres was made to the Medicine Bow Division, including Sheep Mountain, which was designated a National Game Refuge on October 8, 1924 (Coughlin's Historical Notes; Medicine Bow Collection, Box 30).

Until recently, the Medicine Bow Division consisted of four ranger districts: Centennial, Foxpark, Bow River, and Brush Creek. It is now administered through two ranger districts: the Laramie District, formed from the former Centennial, Foxpark and Pole Mountain districts, with its headquarters in Laramie; and the Brush Creek District, formed from the old Bow River and Brush Creek districts, with its headquarters in Saratoga.

The Hayden Division of the Medicine Bow National Forest was originally set aside as the Sierra Madre Forest Reserve on November 5, 1906. Two years later, on June 25, 1908, the Sierra Madre Reserve (consisting of 365,620 acres within Wyoming, along with portions of the Park Range Forest Reserve, now part of the Routt National Forest in Colorado, lying along the watersheds of the Encampment River and Big Creek) were combined to form the Hayden National Forest. It was named for Dr. F.V. Hayden, the head of the U.S. Geological Survey in the Rocky Mountain area. On August 2, 1929, President Hoover dismantled the Hayden National Forest. The Colorado portion was added to Routt National Forest, the Wyoming portion was added to the Medicine Bow National Forest as the Hayden Division (Coughlin's Historical Notes; Medicine Bow Collection, Box 30). Previously administered through two ranger districts, the Snake River and the Encampment, it is now operated

as the Hayden District, with headquarters in Encampment.

A detailed analysis of the establishment and administrative changes of the Pole Mountain Division is contained in the section dealing with military involvement on Pole Mountain. Briefly, the Crow Creek Forest Reserve was established in 1900 by President McKinley. Just three years later, an Executive Order designated that same land to be used by the War Department, establishing the Ft. D.A. Russell Target and Maneuver Reservation. Another Executive Order two years later created the Cheyenne National Forest by combining Crow Creek National Forest and the Wyoming Division of Medicine Bow National Forest. On April 19, 1910, the Crow Creek Division of the Cheyenne National Forest was abolished, and the War Department took complete control. This situation remained until 1925, when the administration, protection, and resource development of the land was transferred to the Forest Service, in cooperation with the War Department. With the exception of 3,317 central acres to be withheld as the Ft. D.A. Russell Target and Maneuver Reservation, the Pole Mountain District of the Medicine Bow National Forest was established. On July 1, 1925, it was designated as a Federal Game Refuge. In 1959, Ft. Francis E. Warren (formerly Ft. D.A. Russell) found the Pole Mountain Target and Maneuver Reservation in excess of its needs, and by 1961, all military interests on Pole Mountain were terminated. Boundaries have remained essentially the same, and encompass 55,908.99 acres (USFS "Supplement", Jan. 1972). It is now administered as part of the Laramie District, with headquarters in Laramie.

The Laramie Peak Division was added to the Medicine Bow National Forest by an Act of Congress on August 20, 1935 with the assistance of Wyoming Senators Carey and O'Mahoney (Armstrong 1935:26). The Senate Committee on Public Lands and Surveys recommended that the Senate Bill (S.2695) add certain lands to the Medicine Bow National Forest, and that it be passed with a few minor amendments. The Secretary of Agriculture, H.A. Wallace, described the Laramie Peak area as consisting generally of "relatively low-grade lands unsuited to cultivation". He assessed the commercial timber value as low, but the public value as high because of the watershed. The trees would protect the water supply for irrigation, and check rapid and destructive runoff. Proper protection would eventually insure a profitable yield in forest products and livestock pasture (U.S., Congress, Senate 1935:2).

As of 1932, the gross area within the exterior boundaries of the Laramie Peak area involved 441,740 acres, of which 43,920 acres were state land, 212,860 acres were private land, and 184,960 acres were federal. The gross acreage was classified as follows: (U.S., Congress, Senate 1935:2):

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Secretary Wallace estimated annual administrative costs at not over \$6000, which would be more than offset by forest receipts, and recommended passage of the bill. Secretary of the Interior Harold Ickes was more reserved in his approval, but offered "no objection to the addition of the public lands involved to the national forest" (U.S., Congress, Senate 1935:3).

According to an article written in 1941, approximately 107,000 acres of the LaBonte District were designated as the Laramie Peak Game Preserve (Laramie Peak National Forest and Laramie Peak Game Preserve 1941).

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Intensive settlement of the Laramie Peak region began as a result of the 1916 Grazing Homestead Law which permitted the filing of 640-acre tracts. World War I veterans received residence credits based on military service, and rushed to claim vacant lands. Since the Laramie Peak area was a zone high in lightning-caused fires, the residents were anxious to receive aid from the Forest Service for firefighting, especially since the area was an important watershed to the surrounding irrigated communities (Coughlin's Historical Notes, 2/10/53; Medicine Bow Collection, Box 30).

The current Laramie Peak District was previously administered as the LaBonte and LaPrele Districts of the Laramie Peak Division of the Medicine Bow National Forest. Laramie Peak District headquarters are currently located in Douglas, Wyoming.

PERSONNEL

During the early years of the National Forests there was, understandably, a lack of experienced personnel. Medicine Bow National Forest, in its infancy, was not always staffed with trained employees, but it served as a training ground "for men who were to range far and wide over the nation's forests" (Bruce 1959:106).

Although the Medicine Bow National Forest was established on May 22, 1902, the first Forest Supervisor was not officially appointed until the following spring. The appointment had political overtones, with both Albany and Carbon Counties promoting favorite sons. Carbon County's Lewis G. Davis, a Saratoga Hereford breeder, gained the appointment because of the county's sheep, mining, and timber interests. He set up Forest headquarters at Saratoga, even though that was nowhere near most of the business centers or the railheads. He initially regarded the job lightly, attending to his office business only sporadically. During his tenure he was accused of favoritism and involvement with the Carbon Timber Company. Progress during his administration "might be said to have occurred in spite of his efforts". Davis resigned on April 1, 1907 to become the US Marshall for Wyoming (Medicine Bow Collection, Box 1, "Personnel History").

The Forest Service was transferred from the Department of the Interior to the Department of Agriculture on February 1, 1905, during the Davis administration. Forest policy was directed by Gifford Pinchot, the director of the US Forest Service. The economic potential of the forests was recognized,

and in the early years, grazing was regulated and fees charged. Also, trespass cases were filed against the many timber operations on Forest property (Bruce 1959:8-10). Davis also authorized construction of a ranger station in Chimney Park and a small cabin on French Creek (Bruce 1959:16-17).

Davis' initial full-time staff consisted of three men: Assistant Ranger John Reid, Deputy Ranger John Mullison, and Forest Ranger James Blackhall. Personnel were increased for the summer months. Mullison and Blackhall proved to be influential in the Forest's history. "Whatever progress was made during the initial years, may well be ascribed to the efforts of Blackhall and Mullison" (Bruce 1959:3). Blackhall went on the become the first Supervisor of the Hayden National Forest, serving there from 1908-1928.

John H. Mullison was born in Pennsylvania in 1842. He was a veteran of the Civil War, having been captured by the rebels and imprisoned at Anderson-ville. He came West after the war and was the post trader at the White River Agency at Meeker, Colorado in the late 1860's. Mullison tended to expound on his experiences. He related that he was well liked by the Ute Indians at the agency and was warned by them to leave just before the Meeker Massacre. Unfortunately, the dates do not tally, as the famous massacre did not occur until September, 1879. He came to Wyoming in 1870, where he experienced life as a prospector, tie camp boss, and ranch hand. He was in on the ground floor of the National Forest Service, for whom he worked eleven years. He moved to Laramie from Saratoga when the Forest headquarters were moved, and remained in Laramie with his family until his death in 1912 (Laramie Republican-Boomerang 4/6/12).

The second Forest Supervisor was Jesse W. Nelson, who served from April 15, 1907 to June 30, 1908. Nelson had been a ranger at Cody on the Shoshone National Forest and had proved himself a good grazing administrator. Nelson inherited the services of Mullison (who was 65 by then) and Blackhall among others, as well as the responsibility for the Sierra Madre Forest (later the Hayden Division), the Crow Creek Forest and Military Reservation, and the main Medicine Bow. Grazing and timber were the two main concerns of his administration. He instigated stock counting, which was initially opposed by stockmen, and constructed wire corrals on each driveway at the Forest boundaries. Other occurrences worthy of note were the sale of 10,000,000 measured board feet of timber in 1907 to the Saratoga and Encampment Railroad Company for construction of a line from Wolcott (on the Union Pacific) to Encampment, and the timber trespass case against J.C. Teller. The first ranger stations on the Sierra Madre were constructed at Heather Creek and Big Creek, and a telephone line was built from Saratoga to Brush Creek and Keystone in 1908 (Medicine Bow Collection, Box 1, "Personnel History"). Another early Forest employee of note was lumberman George P. Gregg. Gregg was in charge of timber sales to the Carbon Timber Company, and was responsible for proper clean-up after timber cuts. He was transferred from Medicine Bow during Lovejoy's administration (Bruce 1959:5). When the large of the large o

Nelson's ability in range management was recognized, and he was promoted first to Washington, D.C., then to Denver as the Assistant District Forester in charge of grazing, leaving his post on the Medicine Bow on June 30,1908 (Medicine Bow Collection, Box 1, "Personnel History").

In 1908, James Blackhall became Supervisor of the Hayden National Forest, Parish S. Lovejoy became the third Supervisor of the Medicine Bow, and Louis E. Coughlin came to work for the Forest Service.

Coughlin, known as the "dean of the forest rangers" in the Rocky Mountain region, worked for the US Forest Service for over forty-five years. Coughlin was born on a cattle ranch in the Little Laramie Valley, and entered the Forest Service on May 1, 1908. Less than a year later he was assigned by Nelson as district manager on the Battle Mountain District of what was then the Cheyenne National Forest, where he worked extensively with grazing. In the next few years he served on the Foxpark District and the Centennial District, where he was district ranger. In 1913, he was assigned to the Forest Supervisor's office in Laramie, where he served as office manager. Over the years his various titles included that of deputy forest supervisor, acting forest supervisor, senior clerk, and executive assistant.

In 1936 he transferred to the San Juan National Forest in Colorado as a wildlife specialist, and returned to the Medicine Bow National Forest in 1938. From 1943 until his retirement in 1953, Coughlin served as district ranger of the Pole Mountain District. During his record breaking forty-five years of service, Coughlin was instrumental in establishing many improvements on the Forest, including: the establishment of the Somber Hill fire lookout in the Foxpark District and the Medicine Bow Peak fire lookout, construction of the Woods Creek Road and most of the trails in the Foxpark area, and organization of the Pole Mountain Cattle Association, comprised of permittees using forest range. Coughlin's specialities were fire prevention and wildlife management. He strengthened game laws, established winter game surveys, and set up game check stations. He stepped up range management programs, reseeding, and research projects while in charge of Pole Mountain. He was also interested in beaver control and Christmas tree cultivation.

In 1949, Coughlin was elected the first president of the Wyoming section of the American Society of Range Management. Many of the programs he helped develop are now standard throughout the country. He also trained local reporters in the basic principles of conservation and land use (Laramie Republican-Boomerang 7/20/53).

Coughlin was also the unofficial historian of the Medicine Bow National Forest. In the early 1950's, he compiled historical data from the beginning of the Forest. He collected memos, letters, old reports, and corresponded with early personnel, asking them for their reminiscences. His letters indicate that he hoped to have a history of Medicine Bow completed in time for the 50th anniversary of the Forest, which would have been in 1952. He did compile lengthy historical notes which are available in the Medicine Bow Collection, but never completed his comprehensive history. When he reached the age of 70, Coughlin was forced to retire from government service. He was never able to receive the financial or technical help needed for such a project, and it was therefore never completed. Coughlin died in 1962 in Laramie.

Supervisor P.S. Lovejoy took office on July 1, 1908 and remained until June, 1911. Since the Sierra Madre Division had become the Hayden National Forest in 1908, Lovejoy was responsible only for the Medicine Bow and Pole Mountain

Divisions. He was reportedly difficult to get along with, although much was accomplished during his administration. In Coughlin's view: "P.S. Lovejoy was possessed of a very brilliant mind, but had a peculiar quirk...He was a born troublemaker" (Medicine Bow Collection, Box 1, "Personnel History").

During his tenure, timber sales continued to the Carbon Timber Company. There was also a timber sale to the Laramie, Hahns Peak and Pacific Railroad along their right-of-way through the Forest. A boundary survey was also conducted by a crew that included John Mullison (Bruce 1959:20). personnel continued their regulation of sheep and cattle grazing. Improvements included work on telephone lines connecting Foxpark to Saratoga, Centennial to Brooklyn Lake, Woods Landing to Saratoga, and Laramie to Centennial (Bruce 1959:22-23,27). Construction was done on the Snowy Range Road, a new station at Foxpark, cabins for the Bow District winter use, and various roads and trails. Lovejoy described the sheep industry as the leading economic factor in the Forest, followed by hay, cattle, timber, and mining (Bruce 1959:29). Accounts indicate instances of discontent among Lovejoy's staff throughout his tenure. After an absence of almost two months in Montana, Lovejoy, referring to his office, stated: "...things generally were in a perfect hell of a mess" (Bruce 1959:26).

Christopher M. Granger was the fourth Medicine Bow Supervisor, and served from June 1, 1911 to February 26, 1913. Timber and grazing continued to be the major concerns of the Forest. The Carbon Timber Company was still operating and the Forest was negotiating with it for settlement of a large timber trespass. As part of the settlement, the Carbon Timber Company built a fire line around the outer edges of the timber cut area, and much of the monetary settlement was used in the construction of telephone lines and a wagon road from Centennial via Sand Lake to the Medicine Bow Ranger Station. Most of the sheep grazing was supervised by the grazing ranger at Brooklyn Lake. Reductions were made in both sheep and cattle because of overgrazing. Granger, writing to Louis Coughlin, stated: "I believe the Bow was one of the first places to have systematic range reconaissance". During his administration, ranger stations were constructed at Brush Creek and Bow River (Medicine Bow Collection, Box 1, "Personnel History").

The next Forest Supervisor was George A. Duthie, who served from March 1, 1913 to February 18, 1917. Those four years marked the transition from the era of the saddle horse and wagon to that of the automobile. By 1916 cars could be driven to Keystone, Foxpark, Brooklyn Lake and Libby Flats. With the exception of Louis Coughlin, forest personnel neither owned nor could operate automobiles, and continued to use horses in their work. In 1913, the Medicine Bow National Forest (consisting at that time of just the main Medicine Bow Range) was divided into five ranger districts: Foxpark, Keystone, Brush Creek (Drinkhard), Bow Station and Seven-mile Station. In addition to the five rangers in charge of these districts, a sixth ranger was stationed at Brooklyn Lake to oversee sheep allotments, act as a general trouble shooter in the summers, and work in the Laramie office in the winters. This position had been filled by John H. Mullison, who died in 1913 and was succeeded by William F. Will (Duthie 1916:1-2).

The first advisory board recognized on the Medicine Bow was the Saratoga Valley Stockgrowers Association, representing the permittees on the Platte

Valley slopes of both the Medicine Bow and Hayden National Forests. Later in the year (1916), stockmen on the east side of the range followed suit. At the beginning of Duthie's tenure, grazing was the chief business of the Forest, and timber sales were at a low ebb. However, timbering picked up over the next few years, because of available lumber from the Laramie, Hahns Peak and Pacific Railroad line and the formation of new timber companies and sawmills (Duthie 1916:3-4).

Forest communication depended mostly on the 175 miles of ground circuit telephone line. Roads and trails needed much improvement, and began to receive attention, both for better fire-fighting access and to encourage tourists. Recreational use of the Forest was first developed around this time (Duthie 1916:8).

Succeeding George Duthie as Forest Supervisor was Earl S. Pierce, who served from November 1, 1916 to October 21, 1920. Little information is available concerning his administration.

Huber C. Hilton took over from March 1, 1921 to June 30, 1934 and had, with the exception of Blackhall's twenty years as supervisor of the Hayden, the longest term in the Medicine Bow National Forest, remaining Supervisor for over thirteen years. Hilton graduated in forestry from Michigan State College in 1911. Previous forestry work included experience in Colorado, South Dakota, and Michigan. His lengthy administration oversaw many changes and improvements. A great deal of road construction was completed, including the road across the Snowy Range (1925-1926). The CCC program was established in 1933, with seven camps of some 500 men in or adjacent to Medicine Bow National Forest. Hayden National Forest became a division of the Medicine Bow (1929), and initial surveys and reports were completed on the Laramie Peak area, which became a division in 1935. Sheep Mountain and Pole Mountain were both added to the Forest as federal game refuges. In 1934, Hilton was transferred to the regional office in Denver where he was appointed regional forest inspector. He was then promoted to Chief of the Division of Recreation and Lands, and in 1944 to Regional Chief of personnel management (Medicine Bow Collection, Box 1, "Personnel History").

Successive Forest Supervisors included Phillip V. Woodhead (7/1/34-7/31/35), Jarvis S. Veeder (7/22/35-12/21/42), Clarence C. Averill (1/11/43-6/30/48), David S. Nordwall (10/31/48-12/31/50), E.J. Fortenberry (4/29/51-1957), G.K. Brown (1957-1960), William E. Augsbach (1961-1973), John E. Bennett (1973-1974), Alan R. Duhncrack (1974-1976), and Donald L. Rollens (1976-present).

LUMBERING ON THE MEDICINE BOW NATIONAL FOREST

THE LUMBER INDUSTRY BEFORE 1902

One of the earliest documented uses of what would become the Medicine Bow National Forest (Laramie Peak Division) was for the building of the transcontinental telegraph in 1861. The contract for the construction of the portion from Omaha to Salt Lake City was given to the Pacific Telegraph Company. Edward Creighton was the superintendent of construction. The route followed the Oregon Trail up the Platte and North Platte Rivers, passing through Ft. Laramie and north of the Laramie Peak Division of the Forest along the Oregon Trail (Thompson 1947:361). This route was also used by Ben Holladay's Overland Mail service, as well as the Pony Express.

Charles H. Brown was a member of the party that built the first transcontinental telegraph. In his diary, he described the constant search for poles while crossing the prairies to the east. About 20 to 25 poles were needed per mile. When advance parties reached the Laramie Peak region, abundant timber was found in the surrounding foothills. Camping near the Horseshoe Creek stage station (near present day Glendo), Brown and his party "... started early this morning with whole train for the foothills of Laramie Peak to cut telegraph poles. Our direction was a trifle west of south. The train wended its way up the creek, keeping in the valley thereof...The train made only about eight miles before camping for dinner and cattle rest" (Brown 1881:60,77). After dinner, Creighton and McCreary started on muleback to select a place to cut poles. They found poles in abundance and easily accessible at the base of Laramie Peak.

The train moved forward the following day and "in the afternoon all the men were busy cutting, peeling and hauling out the poles for loading" (Brown 1881:79). By August 6th, "...he (Jim Creighton, Edward's brother) had already cut and distributed from this point—the foothills of Laramie Peak—1,075 number one poles and then cut and shaved, ready for hauling, about 450 more" (Brown 1881:100—101).

For Creighton's division, 400 men, 300 head of oxen, mules, and 100 wagons were used. Creighton and his men finished their section by October 19th. The entire telegraph was finished five days later, slightly four months after the project had begun (Thompson 1947:66-67,363). It is likely that Creighton utilized other portions of the Laramie Peak District, but no other information has been uncovered.

Creighton and C.H. Hutton built a second telegraph line from Denver to Salt Lake City in 1865-1866 along the Overland Trail (Coutant, 1899:374). Ben Holladay had moved his Overland Mail route to this southern passage in 1862 in an attempt to lessen Indian depredations. It appears likely that poles for its construction were taken from the main Medicine Bow Division. It is documented that the system of "swing" and "home" stage stations along the Overland were built from locally cut logs.

Ft. Halleck was built near Elk Mountain in 1862 to house troops protecting the Overland Route. T.B. Murdock, formerly a soldier at Ft. Halleck, stated that he had helped construct the fort... [we] built nearly all the quarters at Ft. Halleck; chopped the logs, and hauled them down from the timber, and put them up; we hauled what timber there was in them from Laramie Peak (U.S., Congress, Senate 1880:74). It would seem that Murdock was actually referring to Elk Mountain.

Ft. Fred Steele was established in June 1868, along the North Platte River at the crossing of the Union Pacific Railroad. The surgeon's report for 1870 states that:

Stone was at first selected, but subsequent orders having been issued to use timber, parties were sent to Elk Mountain, before referred to, where large numbers of pine logs were cut, and drawn to the post. Two stream saw-mills were set up near the river, about half a mile from the post, and the logs prepared for buildings (U.S War Department, Surgeon General's Office Circular No.4, Dec.5, 1870:357-359).

Franklin Hess states that the sawmill was moved to Elk Mountain to facilitate work. Curious Indians were dispelled by blowing a steam whistle on the apparatus (Laramie Daily Bulletin 6/1/56).

The Laramie Peak District was used as a wood source by the Wyoming Central Railroad (part of the Chicago and Northwestern) when it was built from Nebraska through Lusk and Douglas (1886) and on to Casper in 1888. It is also possible that the Cheyenne and Northern Railroad tapped this area when it was constructed northward through Wheatland and on to Wendover in 1887. The Chicago, Burlington and Ouincy Railroad was built from the Bighorn Basin through Wind River Canyon to Casper and reached Orin Junction in October 1914 (Larson 1965:159,340). In a region generally surrounded by plains, the Laramie Peak District represented the only major wood supply for these railroads.

TIMBER RESERVATIONS

One of the earliest government uses of the Forests were for timber reserves. These wooded areas were set aside by the federal government to provide fuel and building materials for government installations.

In the Laramie Peak area, there were three such reserves. The Ft. Laramie Wood Reservation was located in the southeast portion of the Laramie Peak District (Sections 1 through 12, Township 24 North-Range 71 West). It appears on GLO maps surveyed in 1877 and 1883. A series of roads within the timber reserve also appear on these maps. Ft. Laramie was located approximately 45 miles east-northeast of the wood reserve. The Ft. Fetterman Wood Reservation was located in parts of Sections 4 and 5, Township 28 North-Range 71 West, and parts of Sections 32 and 33, Township 29 North-Range 71 West. It appears on GLO maps surveyed in 1879 and 1880. A resurvey in 1923 and 1924, refers to the area as the "Abandoned New Ft. Fetterman Wood Reservation". It was located in the extreme northeast corner of the Laramie Peak District, about 30 miles south-southeast of Ft. Fetterman.

Various sources mention the possibility of old government sawmills in this area. One was located in Cottonwood Park (Township 26 North-Range 71 West) and could have been used in conjunction with either the Ft. Laramie or Ft. Fetterman Wood Reservations. According to Elizabeth Gross, USFS Range Conservationist, the foundation was visible in the pasture across from the store at Hubbard's Cupboard. This particular sawmill supposedly dated from around 1905, but may have been built on the site of an earlier mill (Letter, 12/17/80 from Elizabeth Gross to Laramie Peak District Ranger). The other government sawmill was reportedly located near the head of Mill Creek (Township 28 North or Township 29 North-Range 71 West), which would place it in the vicinity of the Ft. Fetterman Wood Reservation. Timber had been cut all around this area, and ruins of a cabin (probably belonging to a woodcutter) were found along with military cartridges and other artifacts. served as escorts and guards on timber cuts, and also occasionally felled and loaded trees (Letter, 7/16/80 from Tom Lindmier, Historian, to Elizabeth Gross).

A second wood reserve and a sawmill for Fort Fetterman was located on Boxelder Creek about 14 miles southwest of the fort well outside the current forest boundary. In the winter of 1867, Major H.W. Wessels complained that this wood reservation was too far from the fort and the "sawmill's capacity was inadequate for the need of the post". Because Fort Fetterman obviated the need of Fort Casper, the latter was torn down and several of the buildings were moved to Fort Fetterman (Robrock 1975:22,26).

The Ft. Fred Steele Wood Reservation was established during the 1870's to provide fuel and building materials for the fort, although the wood for the initial construction probably came from Elk Mountain and the eastern Sierra Madres. A Lt. McCauley, stationed at Ft. Steele, posted the area with boards nailed to trees, stone monuments, and posts. It was located in Sections 21 and 22, Township 16 North-Range 81 West (it does not appear on the GLO map surveyed in 1898; however, there is an "Old Saw Mill" labelled in the NE/NE/NE Section 22). The Reservation was withdrawn by Executive Order on November 9, 1880 (Mullison 1909:52). Another Ft. Fred Steele Wood Reservation appears on GLO maps surveyed in 1887 in Sections 31 and 32, Township 17 North-Range 80 West. The location of this reserve is somewhat mysterious, because it was in one of the most inaccessible parts of the Forest, almost above timberline (containing only subalpine fir). According to Ranger John Mullison, the only value that land offered was summer range for sheep (Mullison 1909:52-53).

Both of these timber reserves were approximately 35 miles southeast of Ft. Steele.

The wood reservation on Pole Mountain is discussed in detail under "Military Use of Pole Mountain". Briefly, a wood and timber reservation was established in 1879 in Sections 20 and 30, Township 15 North-Range 71 West, and in 1880 was enlarged by adding Sections 28 and 32 (same township), forming a hollow diamond. This reservation was to provide wood for Ft. Sanders near Laramie, Ft. D.A. Russell near Cheyenne, and the Cheyenne Depot. Although this reserve was not officially approved until 1879 and 1880, the land must have been previously considered, as it appears on GLO maps surveyed in 1871 as "Military Reservation for Ft. Sanders and D.A. Russell and for Cheyenne Depot".

UNION PACIFIC RAILROAD

COLORS CONSTRUCTION DE LA CONTRACTOR DE LA

The most extensive early lumbering operations within the present Forest occurred during the construction of the transcontinental railroad across Wyoming. At least three companies contracted with the Union Pacific Railroad in 1867 to cut ties in the Laramie Mountains (first known as Black Hills) prior to the actual construction the following spring. They were Gilman and Carter, Paxton and Turner, and Sprague, Davis and Company (Bratt 1921:162; Homsher 1949:57-58).

Gilman and Carter's main camp was moved west from Pine Bluffs to a point about one mile north of Ft. Sanders in the fall 1867. In June 1868, they established a camp 2 1/2 miles north of Sherman called Sherman Camp Station. Other tie camps were established south of Tie Siding and at Rock Creek and Medicine Bow along the Union Pacific right-of-way. An estimated several hundred thousand ties and 100,000 cords of firewood for steam engines were cut near Sherman Station and Tie Siding so that the tie contractors "...had stripped the hills and canyons for many miles north of Sherman and Tie Siding Stations..." (Bratt 1921:162).

Gilman and Carter was composed of two factions, the Gilman Brothers headed by John Gilman, and the Carter faction, composed of the partnership of Levi Carter and General Isaac Coe (Bratt 1921:136-137). In June 1868, Gilman and Carter took a contract to cut ties for the construction of the Denver Pacific Railway from Cheyenne to Denver. The ties were cut on the headwaters of the Cache La Poudre River in Colorado and driven downstream to the prairie. The Gilman faction did not believe the venture would prove profitable and attempted to withdraw from the agreement. Coe and Carter took on the entire contract which, in the end, netted \$50,000 (Bratt 1921:153-154). As a result of the Denver Pacific episode, it was mutually agreed to dissolve the Gilman and Carter partnership; henceforth the two companies operated separately as the Gilman Brothers and Coe and Carter. The latter was to become the dominant force in the tie industry in Wyoming prior to the turn of the century.

Coe and Carter received handsome profits by paying 35 to 60 cents a tie and receiving \$1.00 to \$1.30 each from the Union Pacific (delivered) at Sherman

Station, Ft. Sanders, etc., along the right-of-way. For cordwood, they paid \$6 to \$8 per cord and received \$12 to \$16 per cord from the railroad (Bratt 1921:144).

Numerous local merchants in and around the new town of Laramie participated in the business of supplying the Union Pacific with ties. Names commonly mentioned are Wilcox and Crout, Charley Bussard, Charley Hutton, the Dawson Brothers, and Hance and the Trabing Brothers. All of these interests participated in large "tie drives" down the Little and Big Laramie Rivers in the early 1870's, tapping the Snowy Range to the west. These companies also cut lumber for the construction of the prairie railroad town (Homsher 1949:58-59).

COE AND CARTER SECOND CARTER

According to Ranger John Mullison's history for the Forest Atlas in 1909. Coe and Carter established tie camps along every drivable stream on the east side of the Snowy Range, and on Douglas and South French Creeks on the west side. Mullison estimated that three million ties were cut from the Medicine Bow from 1867-1870 for the Union Pacific. All ties were cut from lodgepole pine about 11-14 inches in diameter. About 75,000 cords of wood were also cut. According to Mullison, the indiscriminate cutting and shoddy lumbering practices led to numerous forest fires. These fires were allowed to burn themselves out, which resulted in extensive erosional damage to the watershed (Mullison 1909:43-44).

Once the initial construction phase passed, prices for railroad ties dropped to about 50 cents for a first-class tie, and specifications increased from 6 x 6 inches to 7 x 7 inches. Cordwood fell to \$6.50 per cord, delivered. Thus, when the tie industry stabilized and the day of quick and easy profits had passed, most small competitors were forced out of the business, and Coe and Carter prevailed. They soon provided nearly all the railroad ties for Wyoming, western Nebraska, and parts of Colorado (Mullison 1909:45-46).

At this time, the timber companies were under no government regulations and used the public domain and its resources free of charge. The Commissioner of the General Land Office for the United States attempted to regulate the - industry in the Wyoming Territory in October 1871. The Wyoming Land District fell under the following instructions:

...parties 'must pay a reasonable tariff per 1000 feet of timber sawed, cordwood, or other description of timber' taken from the public lands. from the public lands.
...notice is hereby given——

First--That any person or persons whomsoever, who have taken, or caused to be taken, or who have cut or caused to be cut from the public lands of Wyoming Territory timber of any description, including cord wood, will report to this office the amount of timber so cut or taken.

Second--From and after this date, any person or persons engaged, either directly or indirectly, in cutting or taking timber, of any description whatever, from the public lands in Wyoming Territory, without special authority from this office, for any other purpose than that which is actually necessary for the improvement of their respective individual claims, lawfully held under the homestead or pre-emption acts, will be deemed trespassers on the public lands.

Third--From and after the first day of December, 1871, all timber, of whatever description, including cord wood, that has been cut or taken from the public lands in Wyoming Territory, and not accounted for to this office, will be seized and sold to the highest bidder, and the party or parties engaged therein will be prosecuted under the law. (Homsher 1949:60-61).

It does not appear that these regulations were ever taken seriously by the large timber interests. In Albany County, a 16-2/3% tax was levied on lumber. However, it was not popular with the general public and was dropped. Timber taxes remained an issue throughout the 1870's, but business appeared to continue as usual (Homsher 1949:61-62).

Coe and Carter continued operations on the Medicine Bow Range with camps on Rock Creek, Medicine Bow River, Brush Creek, and French Creek. Ties were floated down the North Platte River to Ft. Steele. A significant change in the lumber industry came in 1875 when the Rocky Mountain Coal Company was formed (essentially a subsidiary of the Union Pacific Railroad). Coal mines were located and exploited all along the right-of-way throughout Wyoming, and steam locomotives switched from wood to coal. The cord wood industry was ended, but a new business in mine props began to take its place. From 1870 to 1880, Mullison estimates that 2.5 million ties and 400,000 mine props were cut, delivered, and sold, all from the Medicine Bow (Mullison 1909:46-47).

Louis Sederlin was engaged in timber cutting on the north end of the Medicine Bow Mountains. In the summer of 1875, Sederlin and eight men bought 4,000 ties from a man cutting on Turpin Creek. They also cut ties during the winter of 1875-1876, and drove them down Turpin Creek and the Medicine Bow River to Medicine Bow in the spring of 1876. Sederlin stated in an interview conducted late in his life that he sold these ties to the Longmont Railroad (probably the Colorado Central) at 49 cents a tie. In 1881 or 1882, he built a sawmill near the John Anderson Ranch. He described it as a water powered gang sawmill. He charged 25 to 27 cents per measured board foot (Coughlin's Historical Notes, 1951: Interview with Ranger Bruce Torgny, 2/20/23; Medicine Bow Collection, Box 8, "Timber Management").

According to an article in the <u>Laramie Daily Bulletin</u> (6/1/56) written by Willing Richardson and R.H. Burns, <u>Sederlin built a log</u> chute down a steep hillside in the south half of <u>Sec.10-T18N-R80W</u> (just north of the current forest boundary and marked on current maps). Logs were hauled from the forest to this chute, skidded down to the East Fork of the Medicine Bow River, and

floated down to a boom at his sawmill. This would appear to be a description of the same mill mentioned by Sederlin.

Coe and Carter continued their domination of the Union Pacific business by coercing private contractors and disgruntled employees who tried to cut, drive, and deliver ties on their own. Evidently, Coe and Carter had high political connections in Washington; they made complaints to the Department of Interior in 1880 concerning one particular incident. A "special agent" was sent out to stop the wildcat operations. However, in this case, a reciprocal complaint was made by the independents to the same department. Apparently an agreement was reached by which Coe and Carter bought the forest lands they had logged for \$1.25 an acre. Acreage which they had operated on for 10 years in Township 16 North-Range 80 and 81 West and Township 15 North-Range 81 West was bought for \$35,000 (Mullison 1909:50-51).

The 1883 GLO map shows "Barclay's Tie Camp Headquarters" in the SE-1/4 Sec.22-T18N-R80W, on the east side of the river (currently the Medicine Bow Campground) (see Figure 1). Barclay was a foreman for Coe and Carter (Coughlin's Historical Notes, 1951; Medicine Bow Collection, Box 8, "Timber Management").

In 1884, Coe and Carter was dissolved. The senior member's son assumed control under the firm name of Coe and Coe (Mullison 1909:51).

The Timber and Stone Act of 1878 was often used fraudulently by the timber interests to fell and remove timber on the public domain. Initially it was intended "...for building, agriculture, mining or other domestic purposes" since Wyoming Territory was considered a mineral district. The penalty for violating this statute was a \$500 fine and up to 6 months imprisonment (U.S. Statutes at Large 1877-1879:88-89). Furthermore, it was customary for timber company employees to file on 160 acres if requested by the company. The company would subsequently use the land for logging purposes. The usual reward was \$100 (Mullison 1909:51). Coe and Coe also owned 4,000 acres in Township 18 North-Range 80 West and 640 acres in Township 17 North-Range 80 West. They continued operations on the Medicine Bow River and Rock Creek from 1880-1890. Mullison indicates that the amount of material driven and sold far exceeded the quantity they could have cut on their own holdings (Mullison 1909:53).

This decade (1880-1890) saw a substantial decrease in demand for ties due to internal problems within the Union Pacific Railroad. About 1.2 million ties and 250,000 props were cut from the Forest during that time (Mullison 1909:53).

In the spring of 1895, the Union Pacific cancelled all tie contracts, and Coe and Coe went out of the tie business. The field was now open for a new company to dominate the lumber industry (Mullison 1909:54).

THE CARBON TIMBER COMPANY

The demise of Coe and Coe left a large number of unemployed timber men. Two

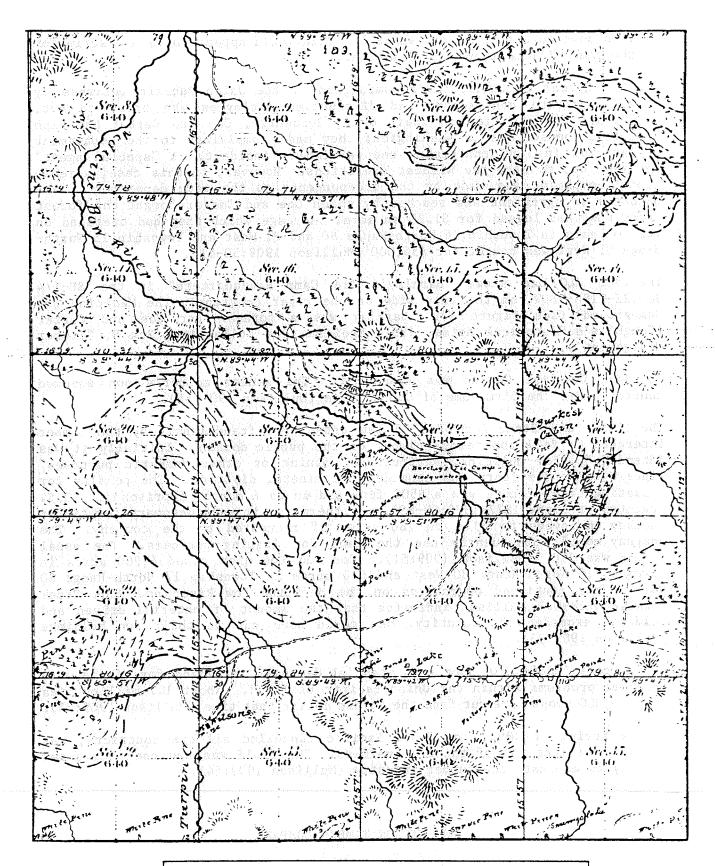


Figure 1. General Land Office Survey Map (1883) for Township 18 North, Range 80 West, showing Barclay's Tie Camp Headquarters.

enterprising businessmen from Hanna reasoned that eventually the Union Pacific would require more ties. Butcher Charles L. Vagner and banker Louis R. Meyer, both from Carbon, offered to supply the lumbermen and provide the money for land entries under the Timber and Stone Act. In return, the men would cut ties and props, and prepare them for the 1896 drive in anticipation of the railroad's needs (Armstrong 1935:5).

This partnership cut ties and props from camps established on the Medicine Bow River and Rock Creek (Township 17 North-Range 78, 79, and 80 West). In 1900, the company was incorporated as the successor to a partnership, capitalized at \$1 million, chiefly in timberlands owned. The principal stockholders were the McGrews of Omaha (closely associated with the Union Pacific Railroad) and R.D. Meyer of Hanna. Mr. Meyer took over his father's interest in the company as a large stockholder. Andrew Olson was an employee of the company in the early days, and later became its president. As of 1914, R.D. Meyer was secretary and the younger McGrew was the general manager at Ft. Steele (Potts 1914:1).

The company had a large operation at Ft. Steele, including a box factory, sawmill, tie loading plant, main boom, and company store. A company town grew up around these facilities, utilizing the company's 497 acres. They also had a sawmill plant, company store, and lumber camp near Encampment at Hog Park. A sawmill and loading plant were located at Medicine Bow. They owned a total of 24,720 acres of timber land in 1914 (Potts 1914:3-4).

The Carbon Timber Company's best years were from 1900 to 1906. Because of its close relationship with the Union Pacific Railroad, "it virtually controlled the Union Pacific's tie supply between Cheyenne and Ogden" (Potts 1914:3). It also manufactured wooden doors for coal and grain cars at Ft. Steele for 35 cents each. In one year alone, 60,000 doors were purchased by the Union Pacific, and because the Union Pacific Coal Company was closely associated with the railroad, all its orders for mine props were given to the Carbon Timber Company as well (Potts 1914:3-4).

In 1906, the company entered into two contracts with the Forest. The May 2nd sale was located on the headwaters of Douglas Creek near Keystone, and involved 165 million measured board feet. The October 18th sale was located on French Creek, and involved 15 million measured board feet. These were the first two large sales within the Forest. The May 2nd sale was ultimately cancelled in 1908 due to poor management by the company (as reported by the Chief District Inspector Smith Riley) (Bruce 1959:68-69). They fared little better on the October 18th sale. Rangers Nelson and Gregg oversaw the sale, urging proper cleaning up practices. The company was losing money on the sale according to Riley because of:

- 1) Lack of supervision in the woods
- 2) Cutting unmarked trees (which resulted in the paying of trespass fines)
- Careless stacking on banking grounds (slowing spring drives considerably)
- 4) Unthorough cutting of areas (meaning the company had to go back to comply with contract)
- 5) Lack of supervision and use of improper tools in driving operations (Bruce 1959:72, from Smith Riley's report).

The company asked for and received a reduction in the number of board feet they were required to cut in the fall of 1907. During the spring drive of 1908, the water level was not favorable for driving, and a large amount of lumber was left in the woods and along Douglas Creek. Thus, they were paying the Forest Service for stumpage, but receiving nothing from the Union Pacific for undelivered timber. They were finally allowed to back out of the sale (Bruce 1959:71-72). The company was also involved in a timber trespass case on September 13, 1907, where they had cut beyond their rightful boundaries. A settlement of \$80,000 was reached half in cost and half in labor on a telephone line and wagon road (Coughlin's Historical Notes, 2/9/51; Medicine Bow Collection, Box 8, "Timber Trespass").

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However, the Carbon Timber Company still had large operations in what would soon become the Hayden National Forest (Sierra Madres). They began operating on Encampment Creek in 1902 with a large camp of almost 500 men. By the following spring, they had 500,000 ties ready to drive to the North Platte and Ft. Steele (Blackhall 1915:1). About this time, they also took over the operations of J.C. Teller, who had cut from camps on Pass Creek, North and South Brush Creeks, and North French Creek from 1899 and 1902. He also delivered ties to the Union Pacific Railroad (Mullison 1909:55).

The <u>Grand Encampment Herald</u> devoted regular space to developments at Hog Park, as the town directly benefited from the logging operations. In 1902, the camp was described by a reporter for the papers:

The tie camp headquarters occupies a very pretty spot in a park called Encampment Meadows, about twenty miles south of Grand Encampment, bordering on the Colorado state line.

The establishment of the tie camp adds much to the development of the country. About 300 men will be employed and most of them are men who have not previously resided in the vicinity of Grand Encampment. This will be a handsome addition to the population of southern Carbon Co. Grand Encampment will be the base of supplies for the tie camp, adding commercially to the interests of this place, and the new wagon road built to the camp opens up a new mining country which will also be tributary to Grand Encampment (Grand Encampment Herald, 8/22/02).

The paper continued to praise the timber company and its contributions to the greater community until December 8, 1911, when it announced that the Hog Park tie camp would be abandoned the following spring after the tie drive. The paper stated that government regulations prevented the company from operating at a profit. It stated, "...that the present government policy is to let it stand for future generations or be consumed by forest fires, rather than let it be used to aid in the present prosperity and development of the country" (Grand Encampment Herald, 12/8/11).

According to Blackhall's 1915 history of the Hayden National Forest, the Carbon Timber Company made a purchase of government timber on September 15, 1913. They were also cutting on Dudley Creek and on land that they owned in the Big Creek area in 1913-1915. The company also had another small sale on

the upper drainage of the Encampment Creek (Blackhall 1915:2-3).

The gradual decline of the Carbon Timber Company was brought about by a number of factors. It was easier to operate at a profit without any government controls or restrictions. Additionally, the company fell out of favor with the Union Pacific Railroad. It lost its preferred mine timber and car door business. Then in 1909 and 1910, a large number of ties were rejected by the railroad inspectors. The company had attempted to keep the price of ties at 65 to 66 cents apiece, but in 1910 Dan Wilt, a former company boss, attempted to deliver ties for a lower price by forming his own concern (the Standard Timber Company). As a result, in 1913 the Carbon Timber Company had almost no business from the Union Pacific. Wilt found that he could not deliver on his promise, but he had support from a Mr. Updike who was a personal friend of Mohler, the Union Pacific President. Although the Carbon Timber Company was able to mend its fences with the Union Pacific and receive part of its business that fall, they never again held a monopoly on the tie business (Potts 1914:2-8).

In 1915, P.J. Quealy of Kemmerer took over the Carbon Timber Company and its holdings at a sheriff's sale for \$376,000. Quealy then formed the Wyoming Timber Company, one of the major companies in lumbering until the 1950's (Coughlin's Historical Notes, 1951: "E.B. Tanna Memo of 12/28/16; Medicine Bow Collection, Box 8).

FOREST LUMBERING FROM 1915 TO PRESENT

In 1913, the Union Pacific Railroad attempted to supply its tie needs with sawed Douglas Fir from the west coast. However, their need was too great to be supplied by the West. As a result, Otto Gramm of Laramie received a contract and subsequently organized the Foxpark Lumber Company. Wilt's operation at this time, was also centered around Foxpark. Both men were utilizing the advantages of the recently constructed Laramie, Hahn's Peak and Pacific Railroad. Ties could be loaded and hauled by rail to Laramie, then treated at a special plant built there in 1902. As the railroad helped new companies get started in the southern portion of the Medicine Bow, the timber operations also saved the railroad from bankruptcy (Duthie 1916:4-6).

On January 7, 1914, the Forest Service offered a sale for all the timber adjacent to the railroad line from the Colorado state line to Foxpark. This sale was divided into blocks and sold over a period of years to different companies: Osea Nelson of the Union Timber Company, Dan Wilt of the Standard Timber Company, the Bergstrom Brothers of the Laramie Timber Company (Duthie 1916:4-5).

In 1915, the town of Gramm was built (Sec.2-T12N-R78W) at the site of the construction of a large sawmill. Most of the timber cutting operations at this time were located in the Foxpark region, and rangers were shifted in the winter months from the northern stations to Foxpark. Duthie describes the workers and conditions at this time:

A shortage of labor was at times a serious problem for the operators. Many of the tie cutters were 'floaters' recruited in Denver. In order to keep the men in camp in those days before radio and television, it was necessary to provide some amusement. Therefore, a poolhall was permitted to open in Gramm. Another already existed at Foxpark. Themen for the most part were a rugged lot and on several occasions the supervisor was faced with the problem of keeping bootleggers, gamblers, and other purveyors of illicit sport out of the camps. It took rugged men to buck ties in deep snow. There was a singular lack of labor-saving devices such as we expect to find on similar operations today. For example, when the U.P. tie inspectors came to "load out" the ties, a crew of husky tie loaders worked in a rotating line. As the inspector marked each tie, which weighed from 150 to 250 pounds, a 'loader' shouldered the tie and staggered up a ramp into the railroad car (Duthie 1916:5-6). and the confidency and the confidency and prove that he to make the classical and the confidence of

The Douglas Creek Tie Camp Company, located at Albany, was incorporated under Hans Olson, Charles Engstrom, and Victor Strandquist in 1917 for the January 5, 1917 timber sale on the main Medicine Bow. This company was actually a working subsidiary of the Wyoming Timber Company, which guaranteed their timber sales contracts. Some 51,000 ties were cut from this sale (Coughlin's Historical Notes, 1951; Medicine Bow Collection, Box 8, "Timber Sales").

The year 1925 was one of the biggest lumbering years for the Medicine Bow National Forest. According to the Rock River Review (7/1/26), a record number of railroad ties, mine props, and lumber was cut. The major companies participating in this bonanza year were the Wyoming Timber Company, the Foxpark Timber Company, Stroup and Sheppard, and the Otto Lumber Company. The latter was organized by Otto Gramm (the founder of the Foxpark Timber Company), Andrew Olson (formerly of the Carbon Timber Company), and Hans and Ivor Olson (Andrew's brothers). Their first sale was in Township 13 North-Range 78 West (the Squaw and Lake Creek units). However, they soon transferred operations along the Laramie River watershed in Colorado (Coughlin's Historical Notes, 1951; Medictne Bow Collection, Box 8, "Timber Sales").

Louis Coughlin, ranger and historian, states that 44,810,000 measured board feet of lumber were cut with a value delivered at Laramie of \$1,183,240 during the boom year of 1925. About 500 men participated in the lumber operations that year. Additionally, the Laramie treatment plant built in 1902 supported a working force of 92 men with a payroll in that year of \$139,520 (Coughlin's Historical Notes, 1959; Medicine Bow Collection, Box 8, "Timber Sales").

The Wyoming Timber Company had its main headquarters in Hanna, but in 1926 was cutting in the Forest on Keystone and Horse Creeks with a large camp at Keystone (Rawlins Reporter 10/30/26). This camp was described by a local newspaper in March 1928:

The logging camp of the Wyoming Timber Company at the Holmes, Wyoming post office, locally called Keystone is an innovation

as logging camps go in this part of Wyoming.

It is located on Douglas Creek at the mouth of Keystone Creek. A sawmill also is located at the camp. A dozen buildings including the commissary, cookhouse, bunkhouse for the bachelors, 2-room cabins for married men, and several barns, are scattered throughout the timber. Each cabin or barn and the sawmill as well, are equipped with electric lights. Kerosene lanterns and gasoline lamps have been banished from the camp. The tie hacks and lumber jacks from neighboring logging camps look with envy-upon the Keystone camp and its 'city lights' (clipping, 4/10/28; Medicine Bow Collection, 1927-1934 Scrapbook).

The company was also cutting along Muddy Creek and had a camp known as "Camp No.2" along this stream and another on Indian Creek (a small tributary). Ties cut in this area were driven down the tributaries to Douglas Creek. A large boom was in place on that stream, and a dam was built to flood the flats and pick up ties (Laramie Republican-Boomerang 5/8/27).

The largest single timber sale to date on the Medicine Bow was struck with the Wyoming Timber Company in 1934. It involved 18,000 acres on the Douglas Creek unit near Keystone. Up to 200 men were employed on this sale (Armstrong 1935:8).

The early 1920's saw a gradual change in the lumber industry with the development of a better road system in the Forest and gasoline and diesel powered portable sawmills. With better roads, a portable unit could be hauled by tractor to a timber area, and ties could be economically sawed instead of hand-hewn. This development signaled the end of the tie hack tradition. One forest official was somewhat prophetic when he queried, "Is the time approaching when the picturesque tie hack with his broad axe will be replaced by a sawmill on wheels" (Washington Bulletin 1923; Medicine Bow Collection, Box 30).

Coughlin states that the first timber sale on the Medicine Bow Forest (Hayden Division) where motor vehicles were extensively used was in February 1924, with the firm of Daniels and Helmick. Stroud and Sheppard also used trucks to haul material from Dutton Creek to Rock River, a distance of 25 miles (Coughlin's Historical Notes, 6/23/52; Medicine Bow Collection, Box 30).

In 1927, the cutting of telephone poles began on the Forest. A treating plant for telephone poles was opened at Laramie in 1930 (Armstrong 1935:8).

The next step in the evolution of lumbering involved hauling logs to a permanent, fixed milling plant. With the steady improvement of roads and trucks, R.R. Crow and Company hauled logs from Barrett Creek to their mill in Saratoga in 1937 (Coughlin's Historical Notes, 6/23/52; Medicine Bow Collection, Box 30).

However, all during this period of transition, the tie hack was still very visible and the large tie drives continued. As late as 1938, the Wyoming Timber Company drove 300,000 ties down Douglas Creek to Ft. Steele. Some 350,000 ties were driven down the Laramie River from northern Colorado to

Laramie by the Foxpark Timber Company and the Otto Timber Company. The latter drive was considered one of the largest in history (Encampment Echo 5/26/38).

An era ended in 1940 when the Union Pacific Railroad entirely discontinued the use of hand-hewn, river-driven ties in their system (Coughlin's Historical Notes, 6/23/52; Medicine Bow Collection, Box 30). The last tie drive in the Medicine Bow was on Douglas Creek in the spring of that year.

In 1952, the Medicine Bow Forest advertised its third largest timber sale in history on the Rock Creek unit for 83 million measured board feet. Coughlin estimated that the cut would take 10 years to complete, and a central processing plant would be constructed at Centennial. The principal products would be sawn railroad ties and finished lumber.

The value of the lumber industry to the surrounding communities can be measured in terms of dollars and cents from figures compiled by Coughlin. From 1902-1951, 842,111 measured board feet of lumber was obtained (valued at \$2,137,426.39). Twenty-five per cent of that amount had been distributed annually to all the counties in which the Forest was located in lieu of taxes (Coughlin's Historical Notes, 6/23/52; Medicine Bow Collection, Box 30). Ten per cent was retained by the Forest Service for road and trail maintenance. The balance was returned to the federal government (Armstrong 1935:31).

On December 10, 1951, the <u>Laramie Republican-Boomerang</u> reported the closing of the last of the great timber companies, the Wyoming Timber Company. It had recently been working in the Keystone area and had been operating since about 1915 when it had absorbed the Carbon Timber Company.

THE LIFE OF THE TIE HACK

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The proximity of the Union Pacific Railroad and the large number of lodgepole pine reserves in the Medicine Bow Range made the business of supplying railroad ties the chief concern of the lumber interests from 1867 to 1940. The "tie hack" was the central figure in this industry. He was generally Swedish, Norwegian, or Austrian and was skilled in the use of a broadax (10-12 inch blade, blunt on the opposite end).

The ideal lodgepole pine was about 11 inches in diameter at breast height (figures from 11-14 inches are quoted, the variation depending on what height the tree was measured). An 8 foot length was standard, and in the 1870's the Union Pacific required a measurement of 7 inches x 7 inches. "Specifications demanded that the tie have at least 5 inches of hewn surface on both sides" (Linn 1973:20-21,31).

The process began by felling a suitable tree with a one- or two-man buck saw. The tie hack limbed the tree with a regular axe and measured his 8 foot length with a guide stick. He then "scored" the two opposite surfaces to be hewn with an axe, so that the broadax could work more effectively. This area was then hewn with the broadax. The remaining bark on top was removed with a "spud peeler", a long wooden handled tool with a curved blade on the end.

The hack used a one-man buck saw to cut the tie to length. The last step involved removing the bark from the underside of the tie not exposed during the earlier operations. A "pickaroon" was used to move the tie about. This tool resembled an axe with a metal point on one end.

Joan Drego Pinkerton, author of Knights of the Broadax (1981), states: "a od hack worth his salt could cut 50 ties a day..." (Pinkerton 1981:19). During the rush to complete the first transcontinental railroad, the hack received 35 to 60 cents per tie. This price dropped after the railroad was completed (Homsher 1949:58). Coe and Carter paid as little as 7 to 8 cents per tie before the turn of the century (Interview with Louis Sederlin by Ranger Bruce Torgny 2/20/35). A local newspaper, reporting on a successful strike of the Foxpark Tie and Timber Workers Union in 1934, stated that they were to receive 25 cents for a first-grade tie, 17 cents for seconds, and 12 cents apiece for thirds (clippings, undated; Medicine Bow Collection, Scrapbooks). In 1904, the Carbon Timber Company was paying 12 to 14 cents per tie (Grand Encampment Herald, 7/1/40). The price then could fluctuate significantly, depending on the company and time period, but it did not appear that a tie hack would ever get rich.

Cutting could take place winter and summer. The ties were easiest to haul with snow cover. However, on a government sale, stumps could not be more than 12 inches high. Therefore, winter work might involve shoveling 4 to 5 feet of snow from around the base of the tree to be felled. Horse teams were used to sled the loaded ties out to tie landings along "drivable" streams. Ties were carefully stacked in close proximity to the stream awaiting the spring thaw and high water. "Surge" dams were often built to raise the level of the stream adjacent to the tie landings and to flood low flat areas.

Landings were then broken up with pike poles and picaroons, and ties dumped in the water ready for driving. If a surge dam was in place, it would be broken to allow the logs to "surge" down the channel, riding the crest. A gang of drivers still had to follow the ties and keep them moving. Occasionally, jams would become so severe that dynamite was needed to jar them loose. Frequently used drive streams were periodically cleaned to remove obstacles such as deadfalls and large rocks.

On the west side of the Medicine Bows and in the Sierra Madres, ties were driven down tributary channels to the North Platte and northward to Ft. Steele where they were caught by a large boom. A conveyor-like chain hauled them from the river and past tie inspectors for grading. They were finally loaded into railway cars. The same general practice was followed in drives on the east side of the Snowy Range.

The tie industry, then, required rugged men who could fell a tree, hew a railroad tie, and wrestle it down a freezing mountain torrent. Some were drowned in the tie drives, and others received severe fractures and other injuries. The danger of forest fires was ever present. Camps were isolated, and the tie hack and his family were far from medical help in any emergency. A flu epidemic hit the Wyoming Timber Company camp complex at French Creek during the winter of 1918-1919. Out of 46 camp residents in four adjacent camps, 36 were taken ill and 9 died. Rangers Cyril Webster and Edwin Bunnell cared for the sick, and somehow avoided being stricken. This report is

important as it gives legal descriptions of the camps involved in the epidemic:

- 1. Headquarters Camp Sec.29-T15N-R80W
 - 2. Sourdough Camp southwest of the Headquarters Camp on Sourdough Creek in Sec.30
 - Camp 4 due west of the Headquarters Camp in Sec.30,
 on Headquarters Creek.
- 4. Hans Glad Camp Sec. 20 on Iron Creek

The report stated that all of the camps were from 3/4's to 1-1/4 miles apart by road (Ranger's Report by Cyril B. Webster, 12/21/18-1/21/19; Medicine Bow Collection, Box 8).

The era of the tie hack appears romantic and adventurous with the passage of time, but the reality involved hardships and toil that few experience in the 1980's.

TIMBER SURVEYS

Forest personnel were often involved in timber surveys, an inventory of the amount and location of various kinds of trees to establish what timber resources the forest possessed. The first such survey in the Medicine Bow Forest was carried out by Paul G. Redington and E.H. Clapp on a portion of the Douglas Creek watershed in 1905-1906, subsequent to a timber sale to the Carbon Timber Company.

In 1909, Forest Supervisor P.S. Lovejoy initiated an "ocular" survey to gain a quick rough estimate of the timber resources on the Medicine Bow Division. The USGS contour map of 1904-1906 was used as a base map. As Louis Coughlin describes:

The procedure was to ascend elevated points, and from them to sketch in the timber types distinguishing the parks, mature lodgepole, and the young pole stands or Jack pines (Coughlin's Historical Notes; Medicine Bow Collection, Box 8, "Timber Sales").

This type of work continued throughout the forest and was filled in with more intensive timber cruising teams covering specific areas, section by section, township by township.

GOVERNMENT TIMBER SALES

Soon after the formation of the Medicine Bow National Forest in 1902, timber cutting was regulated and government sales were initiated. This procedure became gradually more sophisticated and master plans were drawn up for cutting order in various regions of the forest. When an area was ready to cut, a

map, timber estimate, report, and stumpage appraisal were made. The appraisal determined a fair stumpage value for the sale. The sale was then advertised at this value for bidding. No bids were accepted below this value. The successful bidder made a contract with the Forest Service, who outlined the conditions of cutting and scaling, classes of timber to be manufactured, stumpage prices, plan of logging and brush disposal. An exact boundary was marked on the ground, and each tree was marked for cutting by Forest Service personnel. The tree was marked with a "U.S." at breast height and near the base so that the Forest Service could control cutting unmarked trees by the successful bidder. Stumps were not to be more than 12 inches high. Full utilization of the trees was urged. Unused brush from limbs and tops was to be piled up and burned when there was sufficient snow cover to reduce fire hazard. Ties, props, and sawlogs were scaled or counted by rangers at the landings and checked against deposits or funds of operators made before cutting. Actual logging practices were also often monitored in the field by rangers (Report: "Forestry Practiced on Medicine Bow National Forest in Wyoming", undated; Medicine Bow Collection, Box 30).

Early indiscriminate cutting in an area that never was heavily forested led to a conservative timber policy when the Laramie Peak District was created in 1935. The first recorded timber sale did not occur until 1939 when Otto Bruns cut 50,000 BF of lumber in T29N-R75W. The following table shows the earliest timber sales on the district (Timber Files, Laramie Peak District, Douglas):

			TABLE	1

· .					
Name	Date	Area	Volume (in 1000's of BF)	Location	
Ivan Van Ortwick	10/18/45	40	225	T25N-R71W	
M and M Lumber Co.	10/15/46	130	331	T27N-R71W	
Harvey Hanks	1/11/50	-	92	T27N-R71W	
Frank Bromley	2/ 9/51	60	100	- T27N-R71W	
Harvey Hanks	5/28/51	270	540	T27N-R71W	
Frank Bromley	6/16/51	360	519	T27N-R71W	
Frank Bromley	10/28/55	170	335	T27N-R71W	
G.H. Schroeder	8/27/41	307	1152	T28N-R71W	
Douglas Timber Co.	3/10/44	210	603	T28N-R71W	
V.N. Johnston	5/ 9/44	80	334	T28N-R71W	
V.N. Johnston	7/30/43	:	150	T28N-R71W	
W. Robertson Jr.	3/ 2/53	331	604	T28N-R71W	
Parker Lumber Co.	11/25/46		w 100	T26N-R72W	
Parker Lumber Co.	10/ 6/47	***	54	T26N-R72W	
Otto Bruns	11/ 8/39	***	50	T29N-R75W	
W. Robertson	9/22/47		67	T29N-R75W	
W. Robertson	10/20/49		130	T29N-R75W	
W. Robertson	1951		120	T29N-R75W	
					1.7

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The following information on the Pole Mountain Nursery was extracted from Coughlin's Historical Notes, 1951; Medicine Bow Collection, Box 8.

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Between 1928 and 1939, the Medicine Bow National Forest carried out a total of 62 reforestation projects. Fifty-nine were on the Pole Mountain District, and there was one each on the Brush Creek, Centennial, and Foxpark Districts. Timber conditions on Pole Mountain differed from the rest of the Forest. Although commercial lumbering was never big on Pole Mountain, there was some cutting done in the late 1800's, which along with the ensuing forest fires, left large areas devoid of trees. Extensive areas once occupied by ponderosa and limber pine that were cut over failed to reproduce naturally. Areas of lodgepole pine burn-over and cut-over reproduced more satisfactorily.

The establishment of the Pole Mountain Nursery was encouraged by the citizens of Cheyenne, who receive their water supply from Pole Mountain watersheds. The Nursery, to provide planting stock for the District, was underway in 1929. After consideration of several possible alternatives, the Forest Service selected a site at the head of Midde Crow Creek at an elevation of 8650 ft, 13 miles from Laramie and 1-1/4 miles from the Lincoln Highway (site of the present Pole Mountain Ranger Station, in Sec.35-T15N-R72W). The Nursery was visible from the summit of Lincoln Highway, and was connected to that point by a scenic road descending the mountainside.

The site was chosen for its soil type and wind protection. The soil was a fine, sandy loam residuum from sandstone erosion. The area was originally occupied by sagebrush and grasses, with nearby stands of a few western yellow and limber pines.

Locations were staked for a dwelling, bunkhouse, garage, store, and tool house. Road construction from the highway to the Nursery was begun, as well as removal of sagebrush and some aspen. The area was plowed twice, harrowed, plowed again the following fall, leveled, and planted the following spring. A water and sewer system was installed.

Work crews were hired locally, except when the CCC camps were located in the District. Planting was done in April and May when heavy wet snows are common. A fairly successful planting was done in 1928-1929 (started before the establishment of the Nursery), on the south side of the Lincoln Highway, east of the Forest boundary in Telephone Canyon. Douglas fir was planted on a steep hillside which had an overstory of aspen with big sagebrush underneath. Another project involved afforestation of 371.4 acres along the Vedauwoo Road, between the Picnic Area and the Lincoln Highway, an area where decomposed granite soil had inhibited the growth of trees. Ponderosa pine seedlings were set in deeply plowed furrows. A few stunted survivors, 12 to 14 inches high, were found in 1951.

The Nursery had a capacity of about 1/3 million transplants annually. The approved annual output by the mid-1930's was 280,000 transplants. There were 107,684 square feet of tillable soil, with a seedling area of 37,016 square feet and a transplant area of 70,688 square feet.

By 1940, the operation of the Pole Mountain Nursery was no longer economically feasible. The growing season was only 3 to 3-1/2 months long, the ground being frozen in the spring. The Nursery could only supply trees for other high altitude areas. By that time, other nurseries had been developed to a point that they could supply stock more cheaply than Pole Mountain. The Nursery was abandoned in 1940. It was converted for a time to a grass nursery and was operated by the University of Wyoming under a special use permit granted in 1947. It is now the site of the Pole Mountain District Ranger Station.

FOREST FIRES AND PREVENTION

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Although there were no complete records kept of fires before 1902, there is evidence of several major fires before the formation of the Forest. Some of the earliest fires in the 1840's and 1850' may have been started by emigrants who camped in the foothills of the Forest on their journey west. As a rule, these fires were minor because the Forest was still in a virgin state. More serious fires began within a few years, as a result of extensive tie cutting. In those early pre-National Forest days, little attempt was made to combat fires, and they were left to either burn themselves out or were extinguished by snow or rain. The timber companies encouraged the tie hacks to prevent fires by withholding their pay until the fire season was over (Bruce 1959:84-85).

Ranger John Mullison blamed the early, serious fires on sawmill operators and claimed that mill sites were often the starting points. These forest fires were common almost every summer from late June to mid September. Two of the worst fires on the Medicine Bows occurred during the decade of 1870-1880. One began at the base of Baldy Mountain on Cedar Creek, and continued up North Brush Creek until reaching the head of the Medicine Bow River at the timberline (burning an area almost one mile wide and fifteen miles long). The other fire involved some of the best timber west of Medicine Bow Peak. It started on the west side of Barrett Ridge, and was combatted by tie cutters from the Brush Creek camp. It took 65 men two weeks to extinguish the blaze. The effect was devastating to ranchers who irrigated with water originating on Barrett Ridge. Streams from both these serious burns dried up by mid summer (Mullison 1909:48).

Other early fires were blamed on the Indians, who reportedly set fires to drive out the white settlers. According to Judge Blair, an early jurist of the region, a number of fires were set in 1868 by Indians in an attempt to keep the railroad from crossing their favorite hunting grounds (Bruce 1959:85-86).

Numerous fires were recorded from 1892 and 1893. In 1892, fires burned throughout the Forest. The Chimney Park burn began near Mountain Home and continued northeast through Chimney Park (Coughlin's Historical Notes, 1951; Medicine Bow Collection, Box 8, "Timber Management").

The Saratoga newspapers reported other fires from 1892: one near the head of Cow Creek in the Sierra Madres, where "Whole townships have been devastated and the damage already done is beyond estimation", and one on the east fork of the Medicine Bow River, which was finally quenched by rain and snow. The paper blamed the numerous fires on the carelessness of hunting and picnicking parties (Platte Valley Lyre 8/25/92; 9/1/92; 9/22/92).

In 1893, fires were reported at the head of the Big Laramie River, on Fox Creek and near Centennial, burning a long stretch of corduroy road near Centennial and bridges between Laramie and Walden. Also in 1893, a fire destroyed Sterrett's sawmill. The mill and all the buildings at the camp (at the head of Spring Creek) were burned, as well as nearby timber. The fire was presumably caused by carelessness, and was extinguished by heavy rains (Platte Valley Lyre 6/13/93, 8/14/93).

The Medicine Bow National Forest was formed in May 1902, but it was several years before an effective fire-fighting system was established. Fires during the first year of the Forest included the Devil's Gate fire, southwest of Keystone in Sections 1, 2, 3, 4, 9, 10, and 11, Township 13 North-Range 80 West, which was fought by crews from Laramie. There was also a fire on Rock Creek, resulting in the Sevenmile burn, and a fire between Mountain Home and Lake Creek (both on the main Medicine Bow). Another bad fire occurred on Mill Creek in the Hayden Forest. The fires were so bad that fire brands were falling in the streets of Encampment. Heavy rains in late September finally extinguished these fires (Coughlin's Historical Notes, 1951; Medicine Bow Collection, Box 8, "Timber Management").

The vegetation changed as a result of these early fires. Large areas of aspen spread, and once-forested areas became desirable range for livestock and wildlife (Multiple Use Management Plan, Snake River District 1972).

In 1906, Forest Assistant Clinton G. Smith prepared a report on fire protection for lodgepole pine. He was concerned with the brush piling and burning practiced during timber operations. In his opinion, such practices did not help prevent fires, and money would be better spent on forming fire lines. In 1911, the Forest drew up plans for reporting fires and locating tool caches (Bruce 1959:87-88).

In 1912, Forest Supervisor Granger prepared a comprehensive fire prevention plan. Granger described the Medicine Bows as being very adaptable to a system of lookout points, likening the forest geographically to a semi-flattened cone spreading out from a sharply rising peak in the center. The Forest could be effectively viewed from three types of lookouts: 1) primary lookouts commanding views of large areas, which were manned throughout the fire season and were connected by phone to Ranger headquarters and the Supervisor's office; 2) secondary lookouts located on less prominent points with towers, which were visited each day during the fire season, and also had phone connections; and 3) tertiary lookouts which had neither towers nor phones and were visited by rangers only during danger periods. As of 1912, the Medicine Bows had one primary, four secondary, and numerous tertiary lookouts (Granger, 1912; Medicine Bow Collection, Box 3, "Fire Control").

The primary lookout was established on Medicine Bow Peak at 12,005 ft in 1909, due to the persistence of P.S. Lovejoy. From that peak and two others nearby, 80% of the Forest could be viewed. Fred Miller, the first lookout on the Forest, resided in a log shack he built himself on Lookout Lake, 1500 ft below the peak. Every day, between July 1 and September 15, Miller would begin the climb to the top of the peak, where he surveyed the forests using 9-power binoculars, a map of the Forest, and a compass. Miller also constructed a small rock shelter on the peak itself. Granger described Miller as "absolutely dependable and faithful to his trust, for on his vigilence depends the safety of millions of dollars worth of public property..." Miller also fulfilled the qualifications of unusual good health and the ability to live alone. "Nothing short of a broken leg would keep him off the peak when he should be there" (Granger 1912).

In spite of a concerted anti-fire program, some forest fires were inevitable. In July 1915, the Turpin Creek fire was reported from Medicine Bow Peak. It started on the rocky divide between Turpin Creek and the Medicine Bow River, and burned almost to the timberline. Whirling masses of fire and gas exploded repeatedly. The seriousnes of the burn pointed out the need for improved roads and fire fighting equipment (Duthie 1916:6). The Turpin Creek burn affected Sections 9, 10, 11, 14, and 15, Township 17 North-Range 80 West. Almost 500 acres were planted in 1919 and 1921, but natural reproduction outstripped the artificial seeding (Coughlin's Historical Notes, 1951; Medicine Bow Collection, Box 8, "Timber Management").

In 1921, the Medicine Bow National Forest made news by hiring Wyoming's first female fire lookout. Miss Lorraine Lindaley was stationed on Medicine Bow Peak, and lived in the 10 ft x 12 ft one-room cabin at the base of the peak (Armstrong 1935:25). Women were again employed during World War II due to the manpower shortage; Medicine Bow had five female lookouts during the summer of 1944 (Laramie Republican-Boomerang 7/27/44).

Other notable fires included the South French Creek burn in June 1930. Seeding was proposed but natural reproduction was successful (Coughlin's Historical Notes, 1951; Medicine Bow Collection, Box 8, "Timber Management"). In 1931, the Toltec fire in LaBonte Canyon in the Laramie Peak area burned about 1,000 acres (clipping, n.d. Medicine Bow Collection, 1927-1934 Scrapbook). During the 1930's and early 1940's, CCC camps were instrumental in constructing lookout towers as well as fighting fires (see details under Civilian Conservation Corps). By 1935, there were six lookouts on the main Medicine Bow, and two on the Hayden (Armstrong 1935:24). By 1937, there were six "fire danger stations" established: Sandstone Ranger Station, Somber Hill, Encampment, Mullen Creek, Ryan Park, and Esterbrook (USFS Memo 1937; Medicine Bow Collection, Box 3, "Fire Control"). In addition to the aforementioned, there have been lookouts at some point in time on Jelm Mountain, Spruce Mountain, Kennaday Peak, Blackhall Mountain, Bridger Peak, Fletcher Peak, Esterbrook, and at Long Lake.

In spite of all precautions, inevitable forest fires continued, and in 1955, two exceptionally severe fires blazed simultaneously. The Lincoln Creek fire (also known as the Brush Creek fire), burned from July 9 through 30. Some 1,486 acres were burned, and damage was assessed at \$87,350. The Rock Creek fire burned from July 6 through 28, and consumed 2,100 acres (USFS)

Report 1955; Medicine Bow Collection, Box 3, "Fire Control").

A General Inspection Report from 1961 summarized the forest fires for the previous ten years by District as follows:

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("General Integrating Inspection Report" 1961; Medicine Bow Collection, Box 8, "Timber Management").

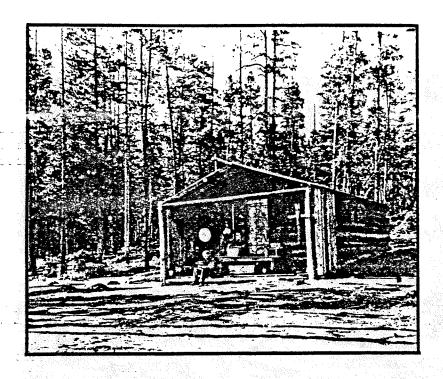
Between 1961 and 1973, there were 471 fires on the Medicine Bow National Forest. Ninety per cent of these were on forested lands. An estimated 67% were lightening-caused, the remainder man-caused. Between 1961 and 1980, 4,408 acres burned on the main Medicine Bow and the Hayden, and 4,905 acres burned on the Laramie Peak and Pole Mountain areas (USFS Report: "Management Situations", 1980).

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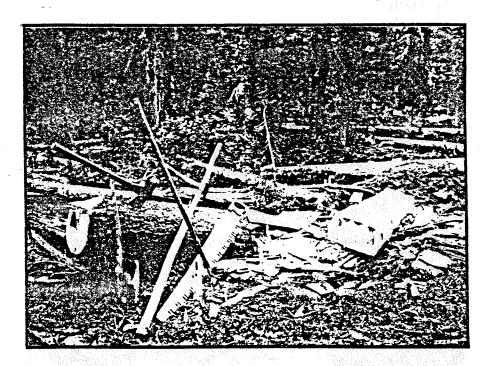
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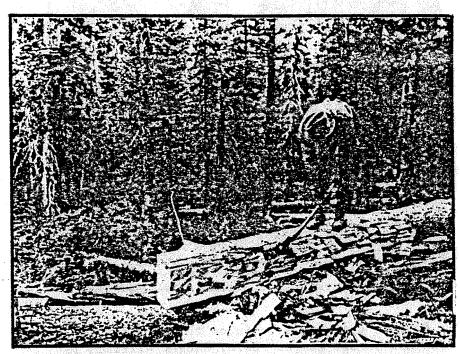
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A typical tie hack's cabin on the West Beaver Foxpark Timber Company Sale; Ranger Williams is seated on the porch. (Medicine Bow Collection - American Heritage Center)

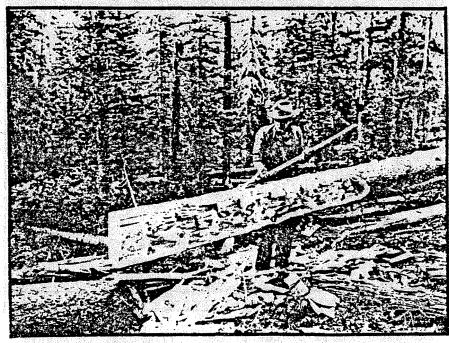


Tie hack "tools of the trade." From left to right: broadas, double-bladed ax, "spud peeler," 8-foot pole, pickaroon, one-man crosscut saw, and finished tie. (Medicine Bow Collection - American Heritage Center)



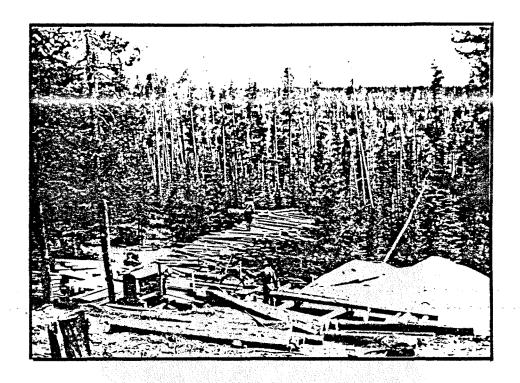
A tie hack hewing a tie with his broadax. The surface has already been "scored" with an ax to aid in hewing.

(Medicine Bow Collection - American Heritage Center)

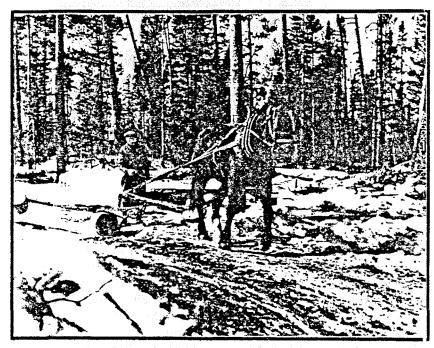


Tie hack peeling the bark from the tie with a "spud peeler." Hewing has been completed, and the hack will soon cut the tie to length. Finally, he will peel the bark from the underside.

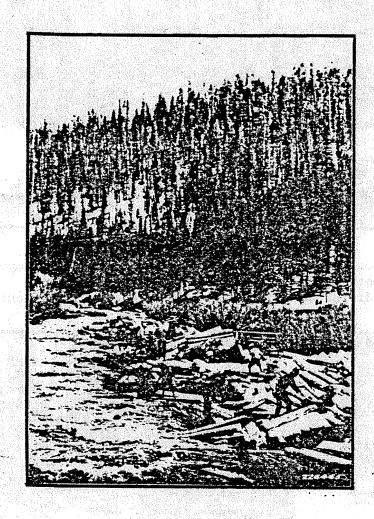
(Medicine Bow Collection - American Heritage Center)



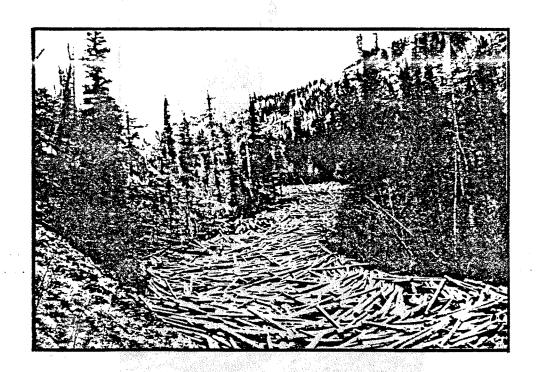
A portable sawmill operation, R.R. Crow and Company Timber Sale, on the Barrett Creek Unit (1937) (Medicine Bow Collection - American Heritage Center)



Skidding logs to a portable sawmill, Foxpark Timber Company Sale, February 1935.
(Medicine Bow Collection - American Heritage Center)

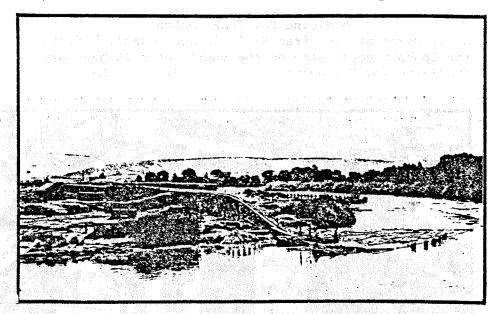


Breaking out a landing on Douglas Creek for the 1928 drive of the Wyoming Timber Company. Ties were stacked before the spring thaw awaiting sufficient water to carry them downstream to the North Platte River and Ft. Steele. Note that the drivers are using pickaroons to move the ties about. (Medicine Bow Collection - American Heritage Center)



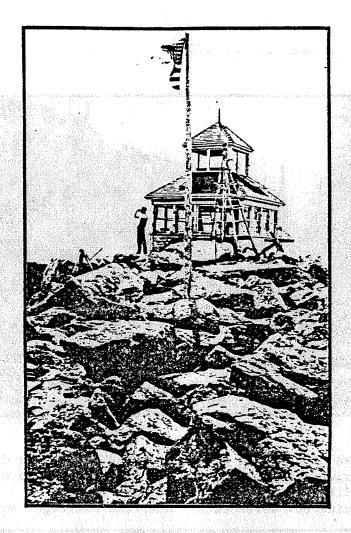
A drive of ties and saw logs jammed on Douglas Creek. Tie drivers sometimes had to resort to the use of dynamite to dislodge the material.

(Medicine Bow Collection - American Heritage Center)

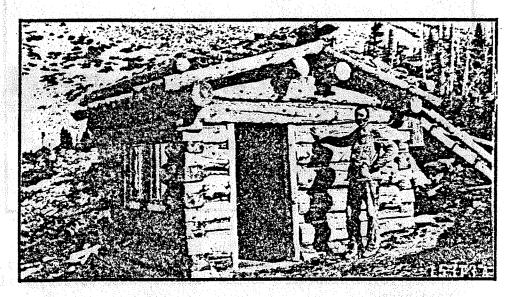


Bull chain and boom at Ft. Steele. The boom caught the river driven ties, and the bull chain pulled them up and along the ramp'past Union Pacific tie inspectors. The approved ties were loaded directly onto waiting railroad cars.

(Medicine Bow Collection - American Heritage Center)

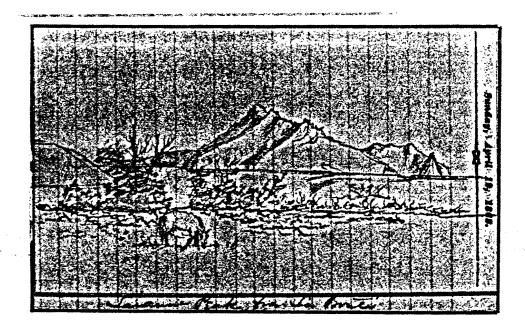


Medicine Bow Peak Lookout
An improvement over Fred Miller's accommodations (below),
the lookout could stay on the summit on a 24-hour basis.
(Medicine Bow Collection - American Heritage Center)

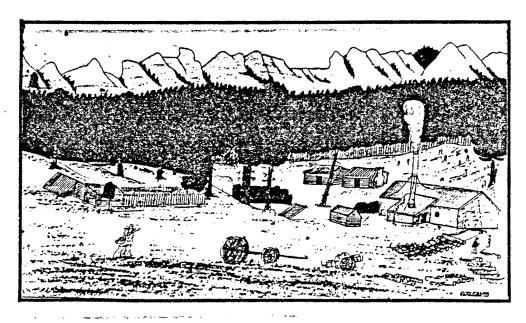


Lookout's cabin at Lookout Lake. Fred J. Miller, first Medicine Bow Peak fire lookout (1909) displays his handiwork. Miller also built a stone shelter atop Medicine Bow Peak. He climbed the mountain every morning from Lookout Lake to search for fires.

(Medicine Bow Collection - American Heritage Center)



"Laramie Peak from LaBonte" from the diary of Robert Clarke (1868) owned by Mrs. H.A. Furlong.



Government sawmill near Laramie Peak, 1863-1865, drawn by Caspar Collins. (Dan W. Greenburg Collection)

LIVISTOCK GRAZING

IN THE MEDICINE BOW NATIONAL FOREST

PRE-FOREST STOCK GRAZING*

The grazing potential of the Wyoming Territory went unnoticed by the thousands of emigrants who crossed its barren expanses bound for points west on the Oregon-California Trail. They drove small bands of sheep which would form the nucleus of the sheep industry in California, Oregon, and the Mormon empire in Deseret.

With the close of the Civil War and the completion of the Transcontinental Railroad in 1869, the sparsely populated Rocky Mountain West began to attract attention. Wyoming Territory was well suited to pastoral forms of agriculture, specifically cattle and sheep raising, as low land prices and free grass and water cut costs almost in half. The initial cost outlay for sheep ranching was estimated at one-third the cost of cattle ranching (Wentworth 1948:308-309).

Consequently, the era of the great sheep trail drives began around 1865, reversing the westward tide of migration, as breeding sheep were driven east from California and later from Oregon.

Wyoming's Red Desert became a traditional winter range for sheep, where flocks arriving from the west in run-down condition regained their vigor before moving to higher summer pastures. Desert shrubs such as saltbrush (spiny, shadscale), winterfat, common sagebrush, bud sagebrush, silvery sagebrush, Nuttal's salt-sage (which provided one-half of feed supply), wheat-grass, and other desert grasses were highly nutritious sheep fodder (Vass and Pearson 1927:28; Wentworth 1948:327,497). Sheep adapted to semi-desert country better than cattle because of their ability to go longer without water. Sheep could obtain moisture by eating snow, and could exist for a long time on dew collected on desert vegetation (Wentworth 1948:397).

Cattle empires had dominated grazing for at least ten years prior to the advent of sheep in Wyoming (Vass and Pearson 1927:10), usurping prime areas of grass and water. The one exception was the vacant Red Desert; sheepmen

^{*}The following discussion is adapted from "Sheep Ranching in Wyoming and the Red Desert" in An Historical Overview of the Red Desert Region, August 1981, by Robert G. Rosenberg and D. Peter Kvietok.

quickly filled this void and remained dominant here throughout Wyoming's history (Wentworth 1948:538).

The sheep industry got underway in the late 1870's and early 1880's in this portion of Wyoming, with such pioneers as Robert Taylor, Ike C. Miller, Frank Hadsell, the Savage Brothers, Fred Kindt, and William W. Daley. Walter and Richard Savage drove 5,000 to 6,000 sheep into the Rawlins region in 1882 or 1883 and quickly enlarged their operation, taking in more partners as the business increased (Wentworth 1948:316-317). One headquarters was located on North Cedar Creek just outside the present Forest boundary near the corners of Sec.10,11,14, and 15-T17N-R82W. The Savage outfit was one of the first permittees on the Medicine Bow National Forest.

Fred Kindt arrived in 1885 and established his base of operations in Rawlins. He had at least 25,000 head of sheep in 1886 which he grazed "east of Pass Creek, above its junction with the North Platte". His summer grazing range was in the nearby Medicine Bows before the formation of the Forest (Wentworth 1948:317). Kindt also grazed a large number of sheep in the Sierra Madres and his name appears on the original list of permittees for the Hayden in 1907.

One of the larger sheep enterprises was conducted by the Cosgriff Brothers, who grazed as many as 125,000 sheep at peak periods. The Cosgriffs started near Fort Steele in 1882, relocated in Rawlins in 1885, and soon began purchasing the Union Pacific "checkerboard" lands between Hanna and Rawlins, thereby controlling access to intervening sections and the railroad. Their flocks ranged as far west as Rock Springs and Opal. This far flung network included supply houses for employees that gradually developed into a mercantile system of twelve to fifteen stores extending to Salt Lake City (Wentworth 1948:318).

Some 40,000 head of sheep were shipped out of Wyoming via the Union Pacific in 1880. Significant gains were made after the blizzard of 1886-87 which caused a decline in the cattle industry and helped to break up the large cattle empires. The biggest gains in the sheep industry in Wyoming started in 1897 when the market value increased. By 1901, the price of sheep had doubled. The number of sheep reached an all-time high of seven million in 1910 (Ankeny 1956:1).

The use of the Red Desert region as a winter range depended on the use of the nearby mountains for a summer range. Transhumance, the practice of using summer pastures in high mountain terrain and winter ranges at lower elevations, evolved in Wyoming from the Old World practice of French and Spanish Basque herders in the Pyrenees Mountains (Cookson 1977:95-120). Cooler temperatures, lush forage, and abundant water increased the weight, coat and overall condition of the sheep.

With the increase in the market price of sheep, the number of operators and sheep increased until too many sheep were competing for too small a range. In the Sierra Madres, "...without any regulation or amicable agreements, the object of each owner was to get in first and feed out the range as fast as possible and before his neighbors could reach it" (Lovejoy 1909:19).

The larger outfits benefited more than smaller outfits from the lack of regulations. The Cosgriff Brothers controlled much of the west slope of the Sierra Madres:

They would have from four to six bands of yearlings near the range they wished to control and would keep any one or two other band owners in a separating corral every day of the week by mixing a different band with them every day which in time would force the small owner to get out (Bruce 1959:52).

In 1916, Supervisor Blackhall of the Hayden stated that prior to the formation of the Forest, from 335,000 to 340,000 sheep were grazed on the Sierra Madres. As a result, by the time this area was set aside as a forest reserve (1906), the entire range had been badly overgrazed. According to Blackhall:

The grazing industry of this section is nearly extinct, brought on by overstocking, in fact with the exception of that portion which is protected by the long period that the snow lies on the ground, the short summer season and the early advent of winter, it may be said that the country is destitute of all forage necessary to support animal life... (Bruce 1959:51)

GRAZING ON THE FOREST

The Medicine Bow National Forest was formed in 1902, but a grazing program was not instituted until 1904. At first no fees were charged, but the quota of sheep was set at 40,000. Since the Sierra Madres were still public domain at that time, the excess sheep were diverted into that area. Considering the region was already badly overgrazed, this practice seems to have added to the problem. In 1905, the limit was raised to 50,000 head, and in 1906 the Forest began charging a fee but raised the limit to 70,000 head. At this time, the Medicine Bow Forest extended into Colorado, but little sheep grazing occurred in that state (Lovejoy 1909:19).

POLE MOUNTAIN

An estimated 5,000 to 6,000 sheep were grazed on the Crow Creek Forest Reserve (Pole Mountain), which was established in 1900. Local users worked out their own system of allotments and numbers which Forest Supervisor Nelson felt the Forest Service could not improve upon (see Figure 2). In 1910, the number of sheep remained at 5,000-6,000 in addition to 447 cattle and 159 horses. Senator Warren and the Warren Livestock Company requested a permit to graze 60,000 sheep, a portion of which would be in areas where small operators had prior rights. The problem resolved itself when the War Department took over the area and banned all grazing. Although President Theodore

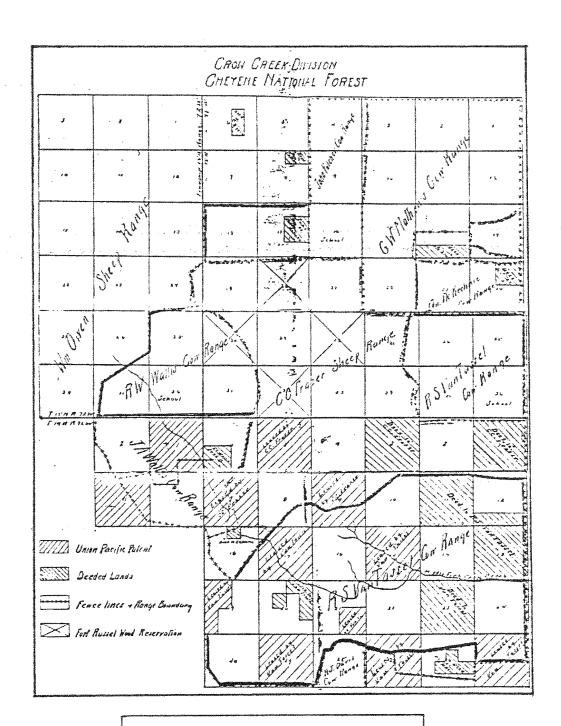


Figure 2.

GRAZING ALLOTMENTS

1910 Map of Grazing Districts on Pole Mountain SOURCE: Medicine Bow Collection Roosevelt had transferred the Forest Reserve to the War Department in 1903 for use as a military reservation, it was essentially still administered by the Forest Service. Gradually the War Department took more control:

In case of any possible difference of opinion or any question, any instructions or directions given by the Supervisor should be issued only after consultation with the Military Officer in charge (Bruce 1959:41).

Therefore the military commander for Fort D.A. Russell held final power over major grazing and timber decisions. In 1908, most private lands within the reservation were exchanged for land elsewhere to help create one contiguous unit. In 1909 and January 1910, grazing permits included a clause stipulating that the stock must be removed if it interfered with Army operations, and that new permits must be approved by the Commanding Officer. On August 19, 1910, the entire reservation was officially transferred to the War Department by Executive Order, and was known as the Fort D.A. Russell Target and Maneuver Reservation. The Army requested that a forest ranger be temporarily assigned to the area. Supervisor Lovejoy suggested that the existing grazing permits be continued, as the users were local residents who had been "...careful not to overgraze the range, and they had been fair in dividing up hay, water, and other natural resources." Lovejoy stated: "To refuse to allow the use of the range would in some cases amount to the confiscation of property" (Bruce 1959:45). However, the War Department refused to renew the permits, all of which expired on April 15, 1911. No grazing was allowed on the military reservation after that date.

In 1924, the Fort D.A. Russell Target and Maneuver Reservation was once again considered for inclusion within the National Forest. On June 5, 1925, all but 3317 acres near the center was officially added to the Medicine Bow National Forest. On July 1, 1925 the Pole Mountain District became a national game refuge. Apparently Pole Mountain was reopened for grazing, although at various times stock was removed by the War Department. "Whenever manuevers are being held, or artillery practice engaged in, the permittees have removed stock from the area to be used..." (Peck, Regional Forester 1937:2). The Pole Mountain District was not considered a prime grazing area. "Stocking capacities are based on the estimated carrying capacity of the gulch bottoms" (USFS Memo 4/16/37: "Pole Mountain Recreation Area"). In 1936, there were 1727 head of cattle and 3700 sheep on Pole Mountain. At present, 100% of the District is open to grazing, and all but one allotment is for cattle (Ranger Terry Hoffman, Personal Communication 1981).

SIERRA MADRES

Emphasis on grazing returns to the Hayden where the problems were far greater. Overgrazing had to be dealt with by the Forest Service when the Sierra Madres became a forest reserve. In 1907, permits were issued for 338,000 sheep (an unverified figure as counting corrals had not yet been installed). Nelson, the Forest Supervisor who administered the reserve at this time, later wrote

that no attempt was made to regulate grazing in 1907, and that the sheepmen and cattlemen used their customary range without permit. However, an attempt was made to count the sheep. At any rate, Nelson's count totalled 315,500 sheep on the Forest, or one and two/fifths sheep per acre. Obviously, the area was badly overgrazed (Correspondence from J.W. Nelson to G.D. Pickford, 5/2/49; Medicine Bow Collection, Box 6).

Nelson began working out a solution to a thorny problem by wisely meeting with the Carbon County Wool Growers Association. They developed a sliding scale plan to gradually reduce the number of sheep on the range. An agreement was also reached with Colorado to send 15,000 head to Whiskey Park. In 1910, 35,000 sheep were taken into the Routt National Forest in Colorado. By 1923, the sliding scale was discontinued and reductions came about naturally through changes in ownership (Ratliff 1935:7-8).

As the number of sheep was gradually reduced, formal grazing districts and allotments were established so that a certain number of sheep for each outfit grazed in a specified portion of the Forest. Five districts were initially set up, although the number and borders changed over the years. Stock driveways were established throughout the Forest with counting corrals located at the boundaries. The major driveways were the Savery-Fireline Trail, the Deep Creek-Fireline Trail, the Elkhorn Driveway, the Encampment-Slater Driveway, and a small segment of the Hogpark Trail to Colorado (see Figure 3). Counting corrals were established at the Trail Ranger Station and the Corral Ranger Station. A definite trailing schedule had been worked out by 1914 to avoid delays in entering the Forest (Ratliff 1935:7,822).

The general grazing period for sheep was set from June 15 to September 30. The period for lambing ewes was May 5 to September 30. The charge was 5 cents a head and two additional cents for pregnant ewes. Cattle and horses grazed from April 15 to September 30, at 25 cents for the former and 35 cents for the latter (Wheeler 1913:6).

By 1917, 115,000 head of sheep were grazing on the Hayden; by 1920, there were 100,000 sheep and 7700 cattle. By 1935, the total had fallen to 48,107 sheep and 2325 head of cattle (Wheeler 1913:8).

Regulation of grazing on the Hayden was generally approved by the operators. They realized that the range was being overgrazed, but competition had kept them from regulating themselves. As a result of Forest imposed regulations, the small operator "...now had his own allotment and knows that he will not be disturbed by any larger sheep owners...The large owner also favors the allotment system and would not like to go back to the old proposition of fighting for range" (Blackhall 1915:17). The sheep also left the summer range in much better condition as the range improved, reducing the mortality rate on the winter range in the Red Desert.

The Forest Service also initiated new management techniques which benefited the range and the stock. The practice of "bedding out" was instituted for sheep. As Supervisor Lovejoy stated in 1909: "The sheep are stopped where they happen to be at night, the herder brings up his bed and the same performance continues practically all summer. In this way the sheep travel only about half as far for their days' feed as though they returned each

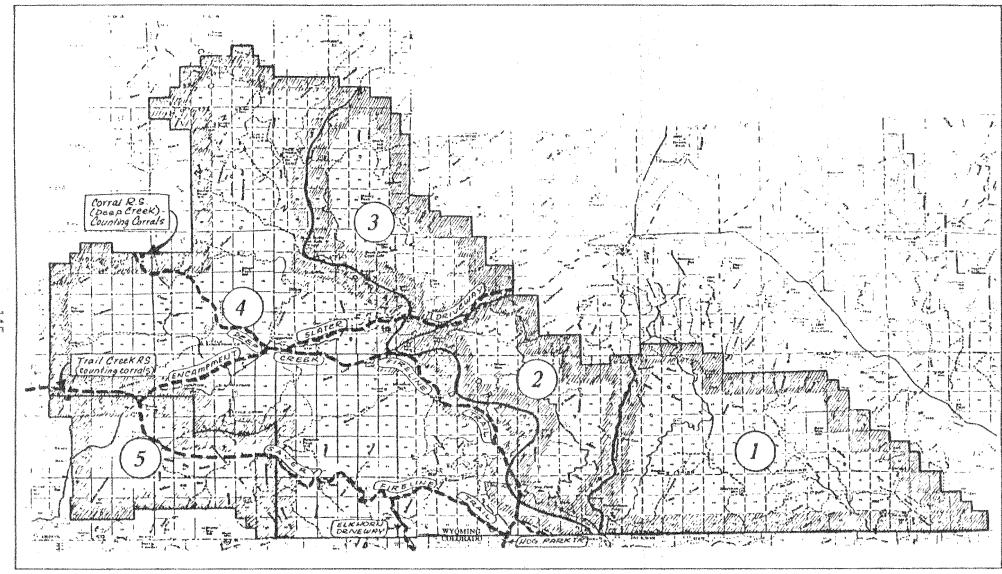


Figure 3.

GRAZING ON THE SIERRA MADRES

Graing Districts and Stock Driveways

SOURCE: Medicine Bow Collection

night to the same bedding ground. Less travel of course means more feed" (Lovejoy 1909:20-21).

The Forest Service instituted the practice of placing salt for cattle at strategic locations across allotments, so that the animals would be more evenly distributed. A certain ratio of bulls was required to be maintained in herds grazing on the Forest. The reason for this was that some large operators had imported registered bulls for their herds that neighboring outfits had been "borrowing" to their own advantage. As a result of this Forest policy, the quality of all the herds improved as ranchers bought their own blooded bulls (Lovejoy 1909:22).

The Hayden was originally divided up into five districts. By 1913, 10 districts existed, and in 1935 the Snake River Grazing District was created out of districts 4, 5, and 6 on the west side of the Sierra Madres. By 1935 there were 28 allotments and four units with 22 outfits (Ratliff 1935:4,11-62). Many of the names dated back to the original 1907 lists and included such pioneers of the sheep industry as the Cosgriff Sheep Company, Kindt Sheep Company and William Daley. The original list of permittees for the 1907 season is shown in Table II.

TABLE II 1907 Permittees on the Hayden

Name	No. applied for	Dis.4	Dis.8
Jack Creek L & C Co.	3,000	rickeystama typing	
Boyer Bros.	12,000	4,500	
Peterson & Brennan	3,000	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	1
A. Rasmussen & Son	7,500		3,000
Dennison & Co.	3,000	3,000	1
C.H. Johnson	1,600		
Blake Sheep Co.	8,000	3,000	
Cullen-McPherson Sheep Co.	9,000	3,000	
Olson & Larson	1,300	1,300	er considera
Baggs Livestock Co.	7,000	1,000	6,000
Dr. Garner	500	500]
August Swansen	1,500		
I.J. Rendle	4,500		
Sundin & Johnson	4,500	The state of the s	
Pioneer Sheep Co.	20,000	8,000	12,000
Startzell & Kirk	2,500		
Osborne Livestock Co.	9,000		
Colo-Wyo Sheep Co.	6,000	6,000	
Johnson-Halsted Sheep Co.	6,000		•
Ole Larsen	4,000	2,000	
Peter Hanson	6,000	4,500	
Standard Meat & Livestock Co.	8,000	8,000	-Agreement
John Alameda	3,000	1,500	Political in the Control of the Cont
Louise Seaverson	3,000	1,500	· Attribuspons
Donnel & Fridley	7,500	-	A CONTRACTOR OF THE CONTRACTOR
Niland-Tierney Sheep Co.	3,000	3,000	******

Name	No. applied for	Dis.4	Dis.8
	10.000	(000	And the second s
R.A. Smiley	10,000	4,000	######################################
Rocky Mt. Sheep Co.	18,000	15,000	Li Controlle
Kindt Sheep Co.	18,500	14,000	an and a second
Carbon Co. Sheep & Cattle Co.	13,000	Sistema of	9,000
Gus Stromberg	1,000	1,000	Wigners and the second
Louis Larsen	1,500	de distribuir de la constante	-
John Grenlund & Co.	3,000	2,000	e construction of the cons
William Daley	6,000	3,000	400aaaa (ii-
O.P. Olsen	2,700	2,400	definition of the second
Murray & McKay	2,500		9994-Daniel
Hansen & Ferguson	6,000	3,000	3,000
Gus Larson	4,500	2,250	and the second s
Abraham Stratton	9,000	The state of the s	

Lambing			
Cosgriff Sheep Co.	40,000	35,000	Addition throughout an
C.H. Anderson	2,000	2,000	
Continental Sheep Co.	4,000	**************************************	
Andrew Johnson	1,500	1,500	٨.
Cow Creek Sheep Co.	20,000	5,000	2,000
John Ostrom	1,500	1,500	
G.W. Fites	3,000	* Control of the Cont	

The Rawlins Daily Times for June 13, 1964 reported that the annual sheep drive through the Snake River District (Sierra Madres) was due to get underway from June 15-20, with 26 ranches and 45 bands of sheep totalling 50,000 ewes. The paper described 66 miles of sheep driveways, half of them leading to Colorado for grazing on the Routt National Forest. It further described the procedure of counting the sheep as they entered the Forest at the Savery Corral on the west side near Savery Creek and on the northern portion of Deep Creek. The largest number of sheep came through the Savery Corral and the Savery-Fireline Trail.

MEDICINE BOW RANGE

In 1910, Forest Supervisor Lovejoy ordered a census of livestock on the Medicine Bow Division. The total figures were 82,793 sheep, 15,210 cattle, and 4344 horses valued at \$500,815.00 (Bruce 1959:62).

A report in 1912 by Grazing Examiner Lynn H. Douglas lists the following users on the Medicine Bow Division (sheep):

			Grazing Dates
Campbell and Savage	12,000 sheep	27,893 ac.	6/15 to 9/30
Sage Creek Company	4,500	10,456	7/01 to 9/01
Leo Sheep Company	6,260	14,830	7/01 to 9/10
Andy Nelson	6,880	19,636	7/01 to 9/10
Dana Meadows Company	3,000	4,158	7/01 to 9/10
S.W. Johnson	6,000	17,155	7/01 to 9/01
David West	3,000	9,146	7/01 to 9/10
John Wick	1,000	6,890	7/01 to 9/10
M. Quealy and Sons	5,000	5,846	7/01 to 9/01
Cosgriff Company	6,880	17,689	7/01 to 9/01
David West (now vacant)	3,000	5,986	7/01 to 9/15

(Douglas 1912:39a)

The report verbally describes the areas utilized by these outfits. Figure 4 depicts the approximate boundaries of these grazing areas.

Sheep were counted in at the Savage Corrals on the west side of the Medicine Bow near Wiant's Ranch (Sec.34-T17N-R82W) on the Saratoga-Gold Hill Road and at the Cedar Creek corrals (SE 1/4 Sec.25-T17N-R82W). The northern counting station was in Stanley Park (T18N-R80W) on the Medicine Bow River on the road to Milo. The east entrance was on the North Fork of the Main Mill Creek, about six miles north of Centennial. The last two stations do not appear on historic maps of the Medicine Bow Division (Grazing Lists; Medicine Bow Collection, Box 5, "Grazing").

The Taylor Grazing Act of July 28, 1934 effectively put an end to the public domain. Unappropriated public lands reverted back to the Federal government, and all public lands required grazing permits and were to be strictly regulated. According to T.A. Larson:

This act, with a complementary executive order, provided that the federal government would terminate home-steading except on reclamation projects, retain permanently its remaining public lands, and regulate grazing thereon in the public interest (Larson 1965:136).

Naturally, Wyoming stockmen were initially opposed to the Act.

The Basque sheepherder was probably hardest hit by the Act. In the early years of sheepherding, a practice known as "tramp herding" had developed by which a herder could earn his wages in sheep, which remained with the employer's herd until the herder had enough sheep to start his own business. He would then send for a replacement by calling on a friend or relative in the Old Country. This system stimulated a steady flow of French and Spanish Basques to the U.S. However, it was dependent on free and open range, since the new Basque owner could not afford to buy or lease land (Cookson 1977: 98-100). The Taylor Act removed the opportunity for the Basque herder to

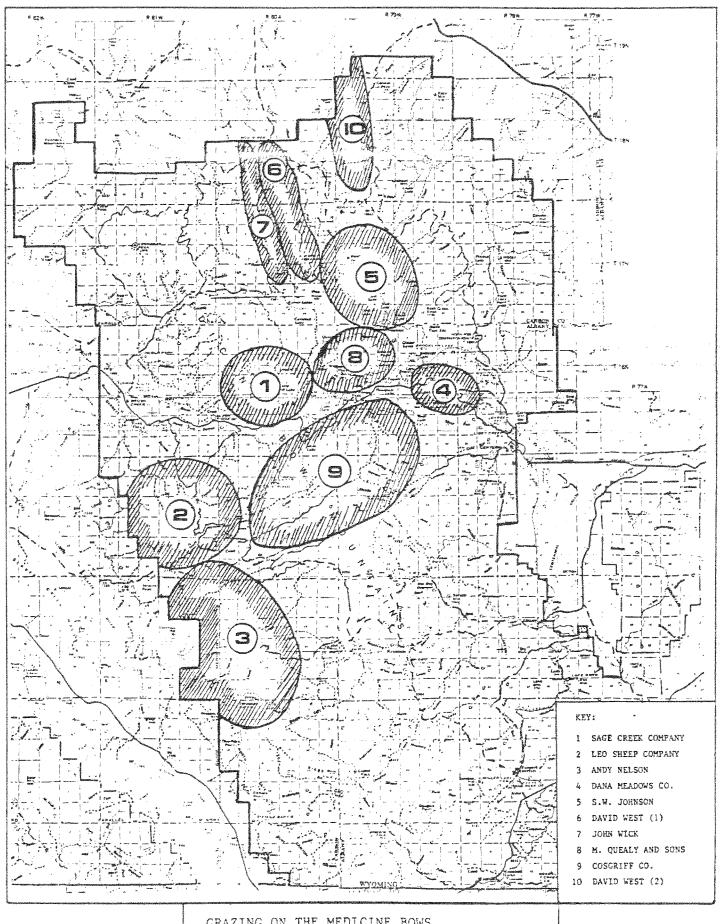


Figure 4.

GRAZING ON THE MEDICINE BOWS

Approximate Location of Grazing Districts

SOURCE: Medicine Bow Collection

advance in this manner. As a result of the Act and the immigration quota system, the sheep industry experienced a severe manpower shortage after 1934.

SHEEP MOUNTAIN

Information on grazing on Sheep Mountain, prior to its inclusion in the Medicine Bow National Forest in 1924, is provided by Arthur Ringland's 1906 "Favorable Report on the Proposed Addition to the Medicine Bow Forest Reserve, Wyoming." His figures showed 2265 cattle and horses and 6000 sheep among 23 owners. The Medicine Bow Forest Reserve Cattlemen's Protective Association petitioned to have Sheep Mountain added to the Medicine Bow in 1906 as a cattle range only. However, Ringland was more interested in a northern addition to the Forest, and Sheep Mountain was not included at this time (Coughlin's Historical Notes, 2/21/46; Medicine Bow Collection, Box 30).

A 1909 grazing report for the old Keystone District showed 21 permittees grazing 2428 cattle during the spring on Sheep Mountain. Oscar Sodergreen ran 3000 sheep on the southern quarter of Sheep Mountain from 1903 to about 1910. Frank McDonald also had 3000 head of sheep on the east side, west of Lake Hattie. He was succeeded in this operation by a Mr. Strom.

Permits were issued for grazing after 1924 when Sheep Mountain became part of the Forest. In 1925 there were 12 permittees, and from 1926 to 1928 there were nine. However, by 1931, the Supervisor's Annual Report stated that "All livestock have been eliminated from this unit [Sheep Mt.] with the exception of a small number which are covered by on and off permits along the boundary" (Coughlin's Historical Notes, 2/21/46; Medicine Bow Collection, Box 30). Grazing was negligable after that date. Sheep Mountain entered the Forest as a game refuge. Being steep and rocky with difficult access, it was never well suited to grazing except on the lower eastern and western slopes and the more gently sloping southern extreme.

GRAZING ON THE LARAMIE PEAK DISTRICT

Since the Laramie Peak District was not created until 1935, the better lands within the general boundary had already been filed upon. Forest Service lands, then, tend to be composed of "high rocky ridges". Out of 440,813 acres included within the general boundaries, only 178,404 acres are Forest owned. 222,302 acres remain in private ownership (Multiple Use Management Plan, Laramie Peak District 1968:1).

The growing of cash crops has not been successful in this region due to short growing seasons and periodic drought conditions. Therefore, stock grazing is the chief concern of the population. Ranch headquarters are generally located along stream bottoms where the land can be irrigated for hay. Cattle, horses, and sheep are grazed in the high country during the

summer season under permit as in the other districts in Medicine Bow National Forest.

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Sheep raising is currently limited, with only nine operators grazing about 3500 sheep in 1979. Having arrived after the cattle industry was well established, the sheep rancher was at a competitive disadvantage. After the Stock Raising Homestead Act of 1916, the sheepmen attempted to compete by filing on 640 acre tracts. Competition existed between the two groups for unclaimed land until the closing of the public domain to homesteading under the Taylor Grazing Act and the Executive Orders which followed. The formation of the Laramie Peak District in 1935 helped to stabilize the land utilization. The Great Depression and drought conditions in the late 1920's and 1930's removed many homesteaders who had been surviving at a marginal level under good conditions. Ranching units have been gradually consolidated, so that the numbers of operators and the general population have declined.

The following table lists some of the earliest and most enduring ranching operations with grazing allotments on the Forest. An effort has been made to group families when possible.

Table III A SELECTED LIST OF PIONEER RANCHERS USING THE LARAMIE PEAK DISTRICT List compiled from allotment files, open and closed, Supervisor's Office, Laramie

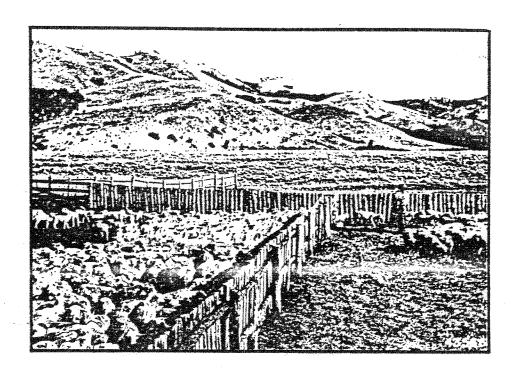
OPERATOR	DATES IN OPERATION	CATTLE/ HORSES	SHEEP
Ballard, Vic (Dwyer, Wyo.)	1935-75	X X	
Bell, John (Garrett, Wyo.) Bell, Orville Scranton Bell, Orville Scranton Belle-Otte Ranch	1935-45 1945-52 1952-1970 1970 to present	X X X X	
Burnett, Dora and Arthur (Garret) Burnett, Dora Burnett, Arthur, Ellen, Marie	1935-75 1976-77 1977 to present	X X X	
Dunn, John and Pansy (Douglas, Wyo.)	1937-1979	X	
Dunn, Pansy	1980-81	X	
Fawcett, Arthur C. (Douglas)	1946-79	X	
Grant, U.S. and Sons (Glenrock) Grant Brothers Grant, John and Elmer, Sno-Shoe R. Grant, Lester U. and Sno-Shoe R.	1937-56 1956-70 1971-76 1976 to present	X X X X	

			gaspheerine commence and the commence of the c
OPERATOR	DATES IN OPERATION	CATTLE/ HORSE	SHEEP
77 77 79 77 77 77 77	1027 / 6	77	
Hall, Ralph H. (Wheatland)	1937–45	X	Sample
Hall, Glen W.	1945 to present	X	
Hawley, Robert C. (Douglas)	1937-73	X	The control of the co
Horr, J. Arthur and Son (Douglas)	1937-41	x	
Horr, J. Arthur	1942-72	X	5-m
Horr, J. Arthur and Arthur C.	1973-75	X	Attention
Horr, J. Arthur	1976-78	X	
Horr, Arthur C.	1978 to present	X	
noii, Aicimi C.	1976 to present	^	400
Leman Bros. (Douglas)	1937-75	X	NO.
Leman, Thomas J., Alice, William C.	1		and the state of t
Beman, Inomas J., Alice, william C.	1979 co present		
McFarlene, David T. (Garret)	1935-59	X	Company of the Compan
May, E.B. and Son (Wheatland)	1939-65	X	The state of the s
Olin Bros. (Glenrock)	1937-61	X	OSCIPITATION AND AND AND AND AND AND AND AND AND AN
Pexton, Lisle and Sons (Douglas)	1935-59	X	The control of the co
Pexton, Lisle E.	1959	X	
Pexton, Lisle E., Lucille, Richard	1960-65	X	
Cross-Y Ranch	1965 to present	X	
4	1959-1973	X	
Pexton, John R. and Nora Mae	1	i	
Pexton, Charles E.	1959-75	X	The second
Deer Valley Ranch	1975 to present	X	
Di 11 di de la Circula (De dalla)	1025 51	v	
Picklesimer and Edwards (Douglas)	1935-51	X X	
Picklesimer and Alexander	1951-56	1	
Picklesimer, Heywood B.	1965-70	. , X .	
Dragon Harry and Toons (Cornet)	1935-74	V	**************************************
Prager, Harry and Leona (Garret)	1935-74	X	entranta del mante del man
Prager, Frank	1	X	and the second
Prager, Sophia	1937-38	X	Ber wildelige
Prager, David and Lawrence	1953 to present	i	Apparent district
Prager, Leona	1975 to present	X	47
Deliver J (Compan)	10/3		77
Sturgeon, Robert J. (Garret)	1943	X	X
Sturgeon, Julia	1978 to present	X	
A 1. What are (Consent)	102752		37
Anda, Thomas (Casper)	1937-53		X
Anda, William	1953		X
Doday Andreth I	1969		X
Body, Ardyth L.	1937-69	COLUMN TO THE PROPERTY OF THE	X
Josendal, Oddmund and Son (Casper)	173/-07		^
Josendal, Harold: Body, Ardyth L.D. Robinette			9
4	1969 to proceed	The state of the s	
Josendal, Harold: L.D. Robinette	1969 to present		
		}	1

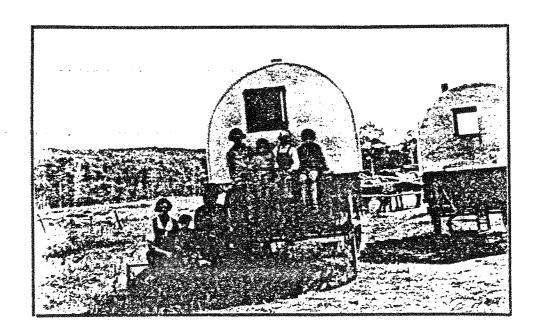
A notable omission on this list is Thomas S. Garrett, one of the pioneer ranchers in the area. In 1890, Garrett and his wife established a ranch in Sec.28-T25N-R73W. Garrett ran shorthorn cattle and used "17" and "TS" for his brands. A country post office was established at the ranch in 1898. The Garretts raised a large garden, and sold produce at a store they maintained on the ranch (Burns et al. 1955:444,453). Their grandson, Thomas S. Garrett, continued to reside at the home ranch and had a grazing permit for the Forest in 1942-1943.

Frank Prager was one of the first ranchers to operate in the Laramie Peak area. He came to Wyoming from Colorado in 1872 and settled on Antelope (or Prager) Creek (Sec.1-T25N-R73W) in 1875. According to the GLO maps dated 1884, Prager's Ranch was located in the SE 1/4 Sec.33-T25N-R73W. Prager originally ran shorthorn cattle, but later concentrated on sheep. His brand was "10" (Burns et al. 1955:451-452).

William Sturgeon settled on Rees Creek in the late 1890's and raised both cattle and sheep, but ultimately concentrated on the former. Sturgeon used the "Diamond W" brand. He had three sons, Robert, George, and Sidney and three daughters, Alma, Katie, Cecelia. Julia Sturgeon, nee Prager, married Robert and as of 1979, was still running one of the Sturgeon ranches (Burns et al. 1955:454).



Ranger Defler counts in a flock of sheep as it enters the Forest at the Cedar Creek Corrals (SE% S.25-T17N-82W) for the summer grazing season (1945). (Medicine Bow Collection - American Heritage Center)



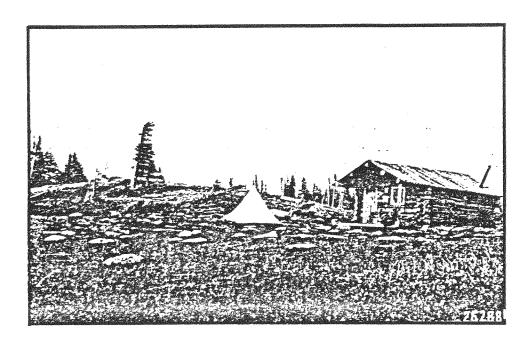
Sheep operator E. Stratton and family, 1926 on the Encampment-Slater stock driveway, Hayden District. Note the use of the traditional sheep wagon.

(Medicine Bow Collection - American Heritage Center)



A Basin Land and Livestock Company outfit and range boss Charles Tomasek (mounted) hauling in supplies at Brooklyn Lake (1914). This outfit ran 6000 sheep on the Medicine Bow Forest.

(Medicine Bow Collection - American Heritage Center)



The Ralston cabin, a high country sheep headquarters at the Brooklyn Lake Recreational Area.

(Medicine Bow Collection - American Heritage Center)



Branding calves on the Medicine Bow National Forest, Spring, 1922. (Medicine Bow Collection - American Heritage Center) MINING
WITHIN
THE MEDICINE BOW
NATIONAL FOREST

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INTRODUCTION

The presence of precious metals in the Medicine Bow Mountains had been suspected quite early. Several accounts state that Captain Douglas, a member of Sir George Gore's hunting expedition found gold in the Medicine Bow Mountains in 1856 and that Douglas Creek was named for him (Coughlin R-2 Bulletin; Medicine Bow Collection, February 1936). F.V. Hayden of the U.S. Geological Survey stated that "valuable specimens of ores and placer gold" were brought to him from the mountains southeast of Ft. Steele (Beeler 1906:11).

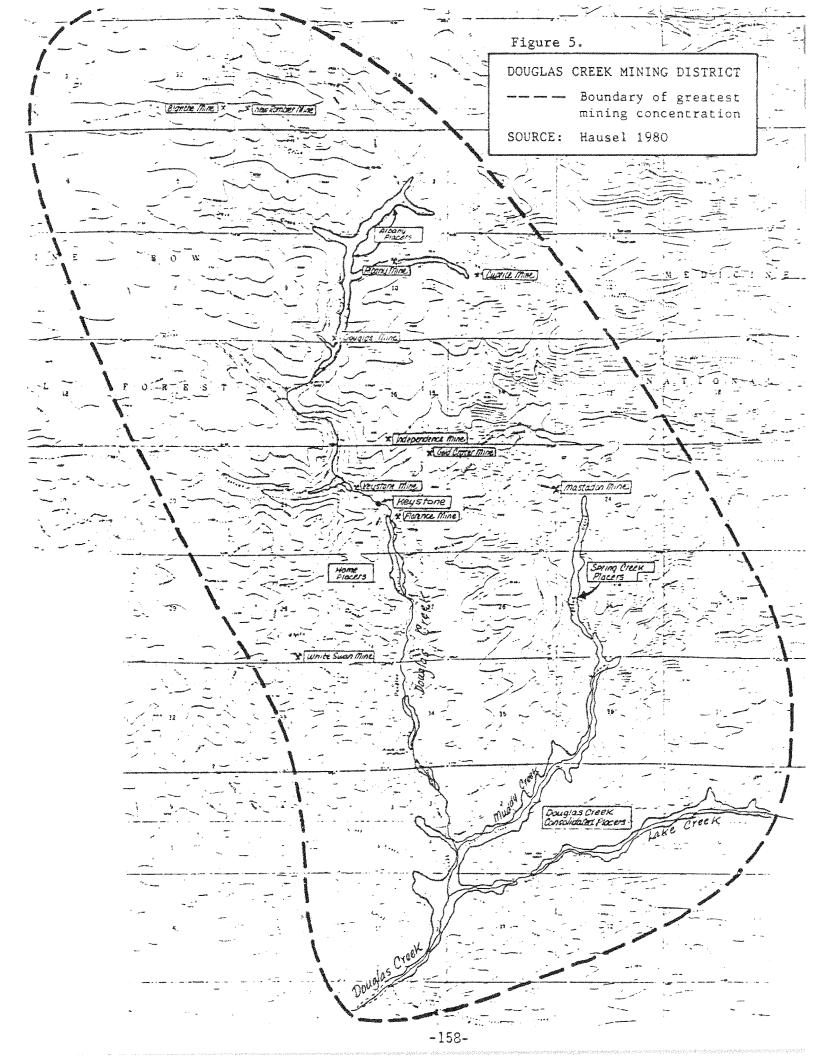
Harry Mullison, an early ranger on the Medicine Bow Forest and a pioneer in the area wrote an interesting account of early mining evidence in Mullison Park. In the Forest Atlas for 1909, Mullison described early shafts and signs of mining on Upper Brush Creek that had been pointed out to him by Ute Indians in 1870. In 1886, he investigated by sinking a shaft "in one of the old depressions." Mullison claimed workers broke through into a shaft that had been sunk at some earlier date and found an elk's ivory with a human face carved upon it. This shaft was sunk in the SW 1/4 Sec.34-T17N-R81W. These depressions and workings reportedly extended for more than a half mile into T16N-R81W (Mullison 1909:29-32).

In Sections 10 and 11 of the same township, a small creek had been worked with evidence of a stone retaining wall and five different excavations along the stream. Trees that were over 175 years old in 1870 were found growing out of the debris from a shaft near this location (Mullison 1909:32).

DOUGLAS CREEK DISTRICT

This district was formed as a result of the discovery of gold by Iram Moore in the fall of 1868 in stream gravels on a tributary of Douglas Creek. This area later became known as Moore's Gulch. This was the first well documented gold discovery in the Medicine Bow Mountains (see Figure 5).

Miners rushed to the area. Using such rudimentary methods as gold panning, sluice boxes and rockers, they extracted an estimated \$8000 worth of gold in the spring of 1869. Many of the washings yielded \$2.00 to \$2.50 to the pan. According to Beeler, "nuggets have been weighed from 16 to 68 pennyweight



each, (one pennyweight is equal to 1/20th of an ounce) but the majority of the gold is in shape of finer particles varying from the fine or flour gold up to flat nuggets an eighth of an inch long" (Beeler 1906:17). Although the principal mineral value was in gold, copper and platinum were also present. Knight estimated that \$229,000 (12,040 ounces) was produced in the Douglas Creek District by 1893 (Hausel 1980:22). The district along Douglas Creek and its tributaries is 15 miles long and 10 miles wide. Gold bearing gravels ranged from 3-20 ft in thickness. The best concentrations were found where the gravels and bedrock made contact (Hausel 1980:22).

Douglas Creek Consolidated Placers

The Douglas Consolidated Mining and Milling Company was the principal company operating in the area. It was incorporated in 1892 with offices in Laramie, and M.N. Grant was the company president. The placers extended from Sec.10-T13N-R80W to Sec.2-T13N-R79W (about eight miles). They also extended along Muddy Creek to the south line of Sec.18-T14N-R78W for about five miles. Considerable development work was done on the properties with extensive ditch systems to supply water for hydraulic mining. Test locations in 1906 yielded \$1.25/cu.yd. of gravel on a location on Muddy Creek and \$.35 to \$.83/cu.yd. on Douglas Creek (Beeler 1906:24-26).

Placer operations have continued intermittently over the years. The Medicine Bow Mining Corporation used gasoline-powered draglines and rotary washing plants on a stretch of Douglas Creek south of Keystone in 1936 and 1946. As recently as 1958, the Moe Brothers had a dragline and floating washing plant on Douglas Creek 1-1/2 miles north of Keystone.

Home Placers

(Sections 10,15,21,22,27,34-T41N-R79W). These placer claims were located above the Douglas Creek Consolidated Placers on the Home, Fay and Minnehaha claims. The acreage totalled 359 acres and was owned by Otto Gramm of Laramie. The largest nugget in the Douglas District, 3.4 ounces, was found on the Home placers. Below Beaver Creek, the drainage opened up into Willow Flat where the placer operations were most favorable. Gold assays averaged \$.18 to \$.24/cu.yd. (Beeler 1906:26-28).

Albany Placers

These operations were located north of the Home Placers on the main Douglas Creek, Moore's Gulch, Elk Creek, Bear Creek, and Dave's Creek. Rob Roy Reservoir has flooded many of these properties. The average gravel on the Douglas Creek portions yielded \$1.25 in gold/cu.yd. (Beeler 1906:29). Traces of platinum and palladium were also reported. In earlier operations on the same property, about \$9000 in gold was recovered from an estimated 4000 cu.yds. of gravel in 1869-70.

Spring Creek Placers

These placers covered the entire length of Spring Creek (about two miles), in Sections 24,25 and the N 1/2 Sec.36-T14N-R79W and were owned by William Sturgis. In 1895, for a thirty day period, about 1200 yards of gravel yielded \$1000 in gold. The gold was described as "coarse and jagged." In 1906, the company anticipated a 5 mile ditch from Douglas Creek as a water source for hydraulic mining operations, as Spring Creek only produced sufficient water for about 40 days in the spring (Beeler 1906:34).

DOUGLAS CREEK LODE MINES

Traditionally the second phase in mining an area is tracing the sources of gold found in placer deposits. Because much of the placer gold was coarse and had pieces of quartz adhering to it, it was reasoned that it had not travelled any great distance from the source (Hausel 1980:25). As a result, lode mines were soon discovered in quartz veins with secondary values in copper. The principal mines were the Keystone, New Rambler, Douglas, and the Florence.

The Douglas Mine

(SE 1/4 Sec.9-T14N-R79W). Located on the west bank of Douglas Creek, the mine was discovered in 1870. By 1903, a 150 ft inclined shaft had been developed with 80 ft of drifts and crosscuts. A seven ft wide ore body was found at a depth of 35 ft and three smaller veins at deeper levels, all containing copper in chalcopyrite, chalcocite, as well as some gold. Currey (1965:8) states that "almost all traces of the mine were obliterated when the present road was constructed along the west bank of upper Douglas Creek."

The Keystone Mine

(NW 1/4 Sec.22-T14N-R79W). According to Beeler (1906:47), this was one of the early mines in the district. This vein consisted of "free gold" and gold in association with pyrite and pyrrhotite. It was tapped by a 365 ft shaft and 5000 ft of drifts. In 1890, a 20-stamp mill was constructed on the property. Operations ceased in 1893. The total production was estimated at \$96,000 (Osterwald et al. 1966:66). "Clean-up operations were conducted at the mine in 1916 and 1939. The mine plant was dismantled and the shaft sealed in the 1950's" (Currey 1965:9). Correspondence dated January 5, 1956 by Clifford E. Skinner, District Ranger, stated that the Keystone mill was demolished by a wrecking crew in the summer of 1955 (Medicine Bow Collection, Box 5). Buildings were removed and the shaft was covered.

The Florence Mine

(SW 1/4 Sec.22-T14N-R79W). This property was described as one of the oldest

in the district, but had been idle for several years prior to 1906 (Beeler 1906:49). Currey states that operations ceased in 1889 and that the machinery was moved to the Keystone Mine (Currey 1965:9). Gold was found in small pockets in association with pyrrhotite. Some of it was rich (\$155 ton), but it was in small and discontinuous quantities. Beeler gave a total production figure of \$50,000 in 1906. The property was developed by a 16 ft shaft with stopes and drifts.

The New Rambler Mine

(SW 1/4 Sec.33-T15N-R79W). First opened for gold, emphasis shifted to copper in 1900. It was owned by the Rambler Mining and Smelting Company. High grade copper was struck at 65 ft which also contained platinum. In 1906, the mine had 2800 ft of development. Production figures in 1906 showed that 1928 dry tons of ore were shipped, averaging 19% copper valued at \$77,622. A "matte" smelter was constructed on the property capable of handling 40 tons per day (Beeler 1906:42). In August, 1918 the mine buildings were destroyed by fire and mining ceased (Hess 1926:134-35; McCallum and Orback 1968:9). The New Rambler was probably the only property in the region to actually market any platinum.

GOLD HILL DISTRICT

(Sections 9,10,15,16 T16N-R80W) This district was established in 1890 (see Figure 6). According to Louis E. Coughlin, the first strike was made by Benjamin W. Arundell in 1888, who later served as a ranger on the Hayden Forest from 1908-12. He could not get financial backing until the fall of 1890 when a general rush began. Laramie, Saratoga, Carbon, and Arlington all began to construct wagon roads into the area. The Saratoga road, having the shortest distance to traverse, arrived first. Col. Stephen W. Downey of Laramie built a stamp mill at Gold Hill which was in operation in 1897 (Rawlins Republican 8/19/26), but it was described as doing "very poor work." That same year, the Fairview Mine, discovered by Joe Lucin on Brush Creek, was described as the premier mine in the district with one assay showing \$364/ton. The Saratoga Sun (2/4/92) described winter at the Gold Hill Camp:

It has been no easy matter to keep Gold Hill from being snowed under this winter. Accurate records have been kept, and these show that snow fall has totalled 329-1/2" or more than 27 feet in 4 months.

The Acme Consolidated Gold and Copper Mining Company of Laramie and Boston, Massachusetts had 20 claims at Gold Hill which it had begun working in 1900. By 1905, grandiose plans were laid for a townsite with twenty-five cottages, a hotel and power plant for electricity (Centennial Post 10/30/05). A great deal of money was spent in development work equipping the mines with steam operated hoists utilizing large boilers. Plans were laid to extend the Laramie, Hahns Peak and Pacific Railroad to Gold Hill. Boston interests under Isaac Van Horn probably kept the camp alive with their financial backing

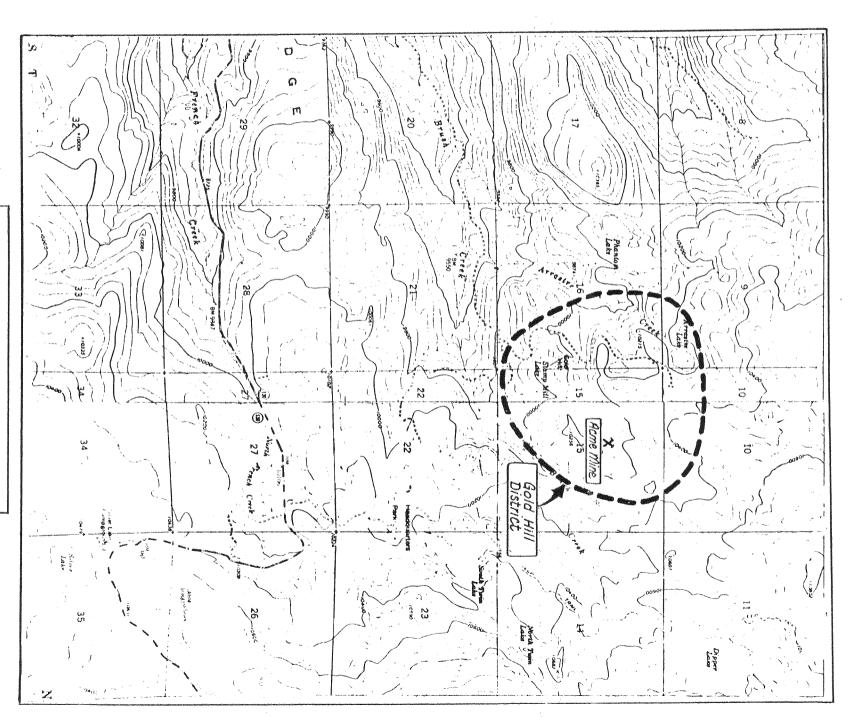


Figure 6.

GOLD HILL MINING DISTRICT

--- Boundary of greatest mining concentration

SOURCE: Hausel 1980

long after it should have died a natural death.

It was reported in 1897 that a rich vein had been cut in one of the company's properties and that plans were underway for constructing a stamp mill (Rawlins Republican 9/29/31). In 1893 it was estimated that \$3000 (145 ounces) of gold had been produced in the district (Knight 1893). The Acme shaft reached a depth of 169 ft in 1905 when the public interest reached its peak.

The railroad was never built to the camp and interest in Gold Hill soon lagged, only to be rekindled in 1931. R.M. "Scotty" Levon found a vein of free milling gold (the Camp Bird) on the Magnolia claim which had been prospected in the early days of the district. Levon was backed by F.E. Anderson, a prominent Laramie attorney. Plans were underway to install a mill at the mine site. However, as in the past, reports were greatly exaggerated, and Gold Hill once again sank into obscurity. The following article is interesting as it describes the condition of the old mining camp in 1931:

There are 25 or 30 cabins standing as reminders of the beginning of what might have been a thriving mining settlement. Snow has caved in the roof of the old hotel building, but the post office, two saloon buildings and other souvenirs of bygone days are still standing (Laramie Republican-Boomerang 3/21/31).

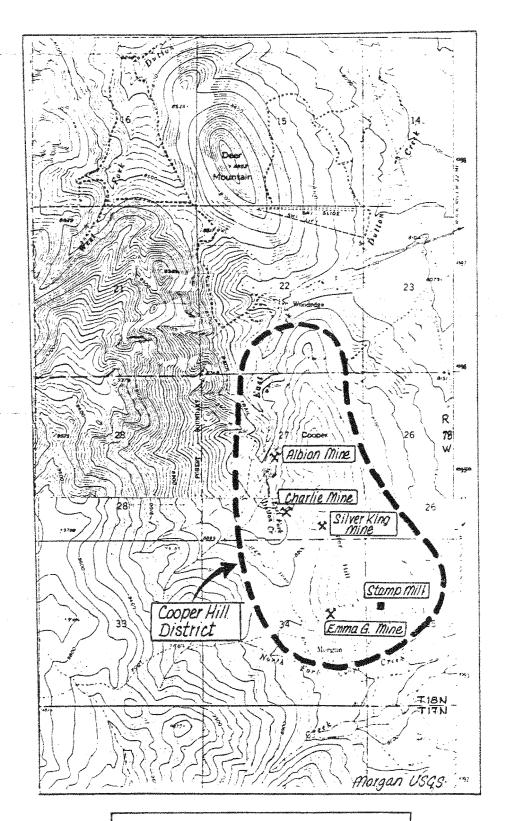
In 1931, Otto L. Burns, a prospector from Gold Hill in 1891, was interviewed by Ernest Linford and related that "in its hey-day, there were about 500 people at Gold Hill, with four saloons, several groceries and hotels." He also mentioned the Leviathon and Little Giant as early claims at Gold Hill (Coughlin's, Historical Notes, Medicine Bow Collection Box 5, "Minerals Management").

A considerable portion of the Gold Hill District is on patented mining claims surrounded by Forest Service land.

COOPER HILL DISTRICT

(Sec. 26,27,34,25-T18N-R78W). Rich float and an outcrop of galena were found in 1888, and the Cooper Hill District was formed shortly thereafter (see Figure 7). Principal values were in gold, lead, copper, and silver carried in quartz veins. Beeler claims that this district encompassed part of the "Old Herman Mining District." Camp Herman was represented by a set of "ruined cabins" near Sand Lake, according to Louis Coughlin's 1951 recollections. The Cooper Hill Deep Mining Company had the Little Johnnie and Laura Bell claims on Bald Mountain in the Herman District. The company was capitalized at one million dollars and the trustees included Thomas C. Van Bentusen, Alexander B. Hamilton, Dwight Smith and Thomas Simpson.

A 10 stamp mill was constructed in 1898 in the SW/NW sec.35, and although hundreds of tons of ore were processed, recovery was poor. The principal mines were the Albion and the Emma G. Others in the area included the Charlie,



Silver King, Cooper Hill, and Richmond Mines. The Rip Van Winkle Consolidated Company was still doing work in the area as late as 1906. One source states that no ore was ever marketed and no production figures have been found. Most of the mining locations at Cooper Hill are just outside the Forest boundary or on patented mining claims (Beeler 1906:59-60; Hausel 1980:39-43).

CENTENNIAL RIDGE DISTRICT

The discovery of gold deposits in stream gravels on Centennial Ridge led to significant lode discoveries in 1875-76 (see Figure 8). The district was established as a result of this activity in 1876. Stories vary on the actual discovery of gold and the Centennial Mine. The Centennial Post (1908 and 1909) carried a story on the mine's discovery, relating how a group of hunters crossing the mountains stopped to rest and found gold glimmering among the rocks. They picked up samples and showed them to Col. Stephen Downey of Laramie. The samples were tested and "pronounced to be gold, pure gold" (Wiegand 1976:4).

The Centennial Mine

(SE 1/4 Sec.4-T15N-R78W). This was the chief producer of the district. The ore was described as "free-milling gold associated with quartz veins" (Hausel 1980:32) and averaged 1.5 ounces per ton. The mine's total production was placed at \$90,000 (4780 ounces) of gold (McCallum 1968:10). An ore sample from the mine won first prize at the Paris Exposition in 1876. The vein was traced until a fault was encountered; the vein was lost and never relocated (Hausel 1968:10). Stephen W. Downey was the president of the Centennial Gold Mining Company and I.P. Lambing was the superintendent at the mine. A 10 stamp mill was built at the base of the mountain and connected to the mine by means of a 425 ft tramway (Wiegand 1976:10).

The Utopia Mine

(N/NE 1/4 Sec.9 and S/SE 1/4 Sec.4 T15N-R78W). Developed by three adits or drifts in the early 1900's, quartz veins carrying gold were exposed. As with the Centennial, faulting closed the mine as the gold bearing veins were lost. Assays showed a range of values from a trace to 1.64 ounces of silver/ton and a trace to 3.46 ounces of gold/ton (Dart 1929). Total production from the mine is unknown. The Commercial Mining Company, under Bernard Holtun's direction, operated the mine.

The Free Gold

(SE 1/4 Sec.8-T15N-R78W). Also known as the Billy Waters, the mine was developed by 800 ft of surface workings on a gray quartz vein 25 ft in width. The vein carried free gold and pyrite. At least 100 tons of gold ore were milled at the site through a two stamp mill. Assays ranged from .08 to 2.54

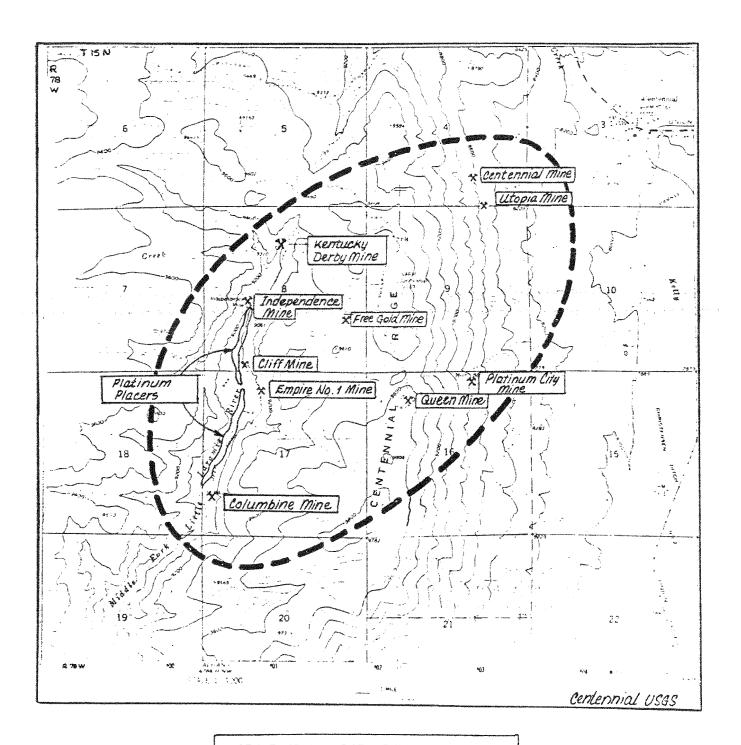


Figure 8.

CENTENNIAL RIDGE MINING DISTRICT

---- Boundary of greatest mining concentration

SOURCE: Hausel 1980

ounces of gold per ton (Hess 1926:129).

The above mentioned mines were the only ones with documented ore production in the district.

After 1900, the district experienced new excitement when platinum and palladium were extracted from copper ores in the New Rambler mine near Holmes several miles to the southwest. This precipitated new mining activity in the region. A number of new mines were developed on Centennial Ridge.

Empire No. 1 Claim

(NE 1/4 Sec.17-T14N-R78W). In 1896, Jacob Schnitzler discovered a copper claim on the west side of Centennial Ridge. He dug two tunnels, one of which exposed "a small mass of sulphides or arsenides, probably less than a foot in diamter, ...where a small fracture crosses the tunnel at right angles. The mineral having been determined as simply pyrite, little more attention was paid to it, and the tunnel continued 70 ft." (Hess 1926:130).

However, in 1923 the ore from this tunnel was assayed and found to contain platinum. This precipitated the ensuing rush to stake out properties in the vicinity during the winter while the ground was still covered with snow. Exaggerated claims appeared in the press that attracted nationwide attention. Frank L. Hess and Charles W. Henderson of the U.S. Geological Survey visited the district in June 1924 "to examine the new prospects" as commercial platinum deposits were considered rare. Their analysis was not promising. Hess concluded his 1924 report (published in 1926) with the following statement about the district's potential:

Platinum metals, in very small quantities, are undoubtedly present on Centennial Ridge. At some places there may be larger masses of rich ore than the small pockets found in the Middle Schnitzler Tunnel, but the writer believes the chances for such discoveries are too few to warrant the expenditures of money, time and labor (Hess 1926:135).

Unfortunately, no one was listening. A local promoter, A.J. Hull, was the prime mover in advertising the potential of the area and even laid out a townsite known as "Platinum City" along the right-of-way of the Laramie, Hahn's Peak and Pacific Railroad about two miles south of Centennial. The Wyoming Platinum and Gold Mining Syndicate sold stocks to the public based on a number of claims Hull and Schnitzler were working. The Laramie Leader (4/8/31) carried a story on Platinum City showing photographs of the "power plant for mill and refinery, mill where the ore is first treated, refinery and treating plant, and the Platinum City site." Apparently A.J. Hull had processed a half ton of ore worth over \$22,000 in April 1931. The article continues:

For some time a city has been platted adjoining the mining property, and when Mr. Hull has the mines sufficiently developed to need a small army of men

the lots will be sold, houses and stores built, and a model city started, with everything that goes to make a model city according to the best plans (Laramie Leader 4/8/31).

Regardless of A.J. Hull's sincerie, by 1994 he was indicted for mail fraud. The Wyoming Platinum and Gold Mining Syndicate had disposed of over 500,000 shares of stock, mostly out of state, and had distributed circulars and letters which apparently exaggerated the claims that the syndicate owned. Hull was never convicted and continued to prospect and work in the Centennial area.

The Cliff Mine

(S/SW 1/4 Sec.8-T15N-R78W). This was an older claim worked by the Cliff Gold Mining Comapny on a lease from the Colowyo Mining Company. Old workings 50 ft above the Middle Fork of the Laramie River had followed a quartz vein 2-3 inches thick. A drift was cut 775 ft without finding gold or platinum. However, 700 ft from the portal, a crosscut was dug NNW for 325 ft which revealed small amounts of gold valued at \$12/ton. A vein was also found that supposedly carried platinum. Hess found little or no platinum in 1924 (Hess 1926:132-33; McCallum 1968:11).

The Queen Shaft

(NW 1/4 Sec.16-T15N-R78W). When visited by Hess on June 10, 1924, a shaft had been sunk 83 ft. Messrs. Bert and Jesse Northrop were in charge of the work at the mine. Several small veins and faults were examined which showed few or no traces of platinum (Hess 1926:133).

Hess also visited a number of placer operations on the Middle Fork of the Little Laramie River on three flats west of Centennial Ridge (W1/2 Sec.17 and S1/2 Sec.8-T15N-R78W). On the middle flat, the Wyoming Platinum Company was working a number of claims which had been partially worked in the past. Hess panned for gold and platinum in areas that were pointed out to him as having high gold-platinum content, but found nothing. What may have been mistaken for platinum by the miners was found to be zircon by Hess (Hess 1926:133).

A two-mile pipeline with a hydraulic nozzle used in conjunction with a sluice box was used that summer. Hess received later reports that no gold or platinum of commercial value was found. A.J. Hull and Jacob Schnitzler had constructed the pipeline in the winter of 1923, and a camp known as Hullville was built about a mile below the Cliff Mine. The camp consisted of three large cabins and two or three smaller cabins (Wiegand 1976:58).

Black Jack Mine

(SW 1/4 Sec.16-T16N-R79W). A cabin and trail are depicted at this location on a General Land Office survey map dated 1898. The Black Jack Mine is also shown on a Forest Service map dated 1913. The present condition of this site is unknown.

Raven-Claims

According to Milton O. Childers (1957), the Raven claims in Secs.15,21, and 22-T15N-R80W were worked prior to 1907. He shows three shafts on his maps, one of which appears to be on the Raven claims. One shaft was sunk 200 ft with 110 ft of drifts, but no commercial ore was produced. Apparently he is describing the shaft in the NE 1/4 Sec.21. Another shaft in the SW/SE Sec.24-T15N-R81W was analyzed. The shaft had been sunk through a quartz vein with chalcopyrite and malachite. However, no production figures were available although the workings were described as "fairly extensive" (Childers 1957:49-50). According to a Forest Service inventory in 1980, a tunnel and associated dump with a mining structure foundation still exists. An unused access road is still evident. No historic artifacts were noted on the site (Inventory of Abandoned Mine Sites, Nov. 1980).

The Inventory also recorded the following mining-related sites:

Silver Lake Trail

(SE/SW/NW Sec.2-T15N-R80W). Two shafts are evident in proximity to the Silver Lake Trail. No buildings were noted.

French Creek

(SW/NE/SE Sec.11-T15N-R80W). The site consists of an adit and ore dump; no buildings were noted.

Snowy Range

(SE/SE/NE Sec.19-T16N-R79W). This mining operation is visible from the Snowy Range Road and consists of a log hoisting apparatus over a shaft. A large boiler used in association with the hoisting machinery is still on the site. Scattered wood and historic artifacts were observed on the site.

Iron Creek

(SW/SE/SE Sec.20-T15N-R80W). Two timbered shafts and log debris were observed on-site.

Rock Creek

(SW/SE Sec.35-T19N-R79W; NW 1/4 Sec.2-T18N-R79W). At least six sites were observed by Forest Service personnel along a half-mile segment of Rock Creek. Three sites were composed of log structures. The three remaining sites bear evidence of mining operations, including two tunnels and a shaft. One tunnel still retains a set of ore car tracks.

ENCAMPMENT DISTRICT

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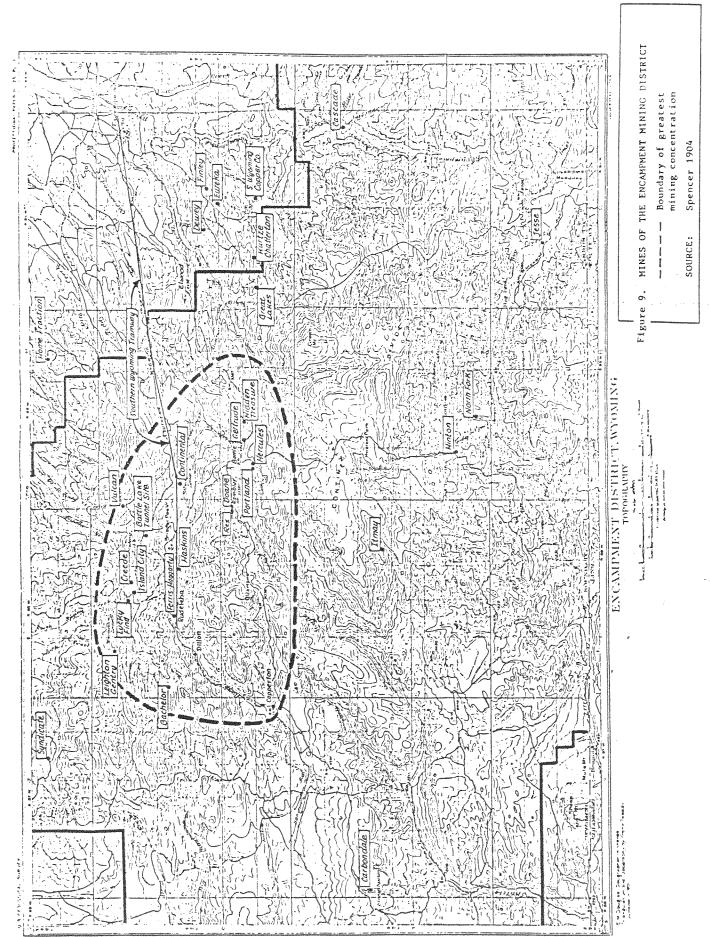
No definite boundaries existed for this region, but a rough rectangular boundary which would include the major mines and camps encompasses townships 12, 13, and 14, with the Colorado-Wyoming state line as the southern border, and ranges 84-87 for the east and west lines (see Figure 9).

Although Ed Haggarty did not make the copper strike for which the region became famous until 1897, prospecting had been carried on since the close of the Civil War (and perhaps earlier) in the Sierra Madre Mountains. In 1868, J.W. Southwick noticed quartz veins running along the surface on what later became the Kurtze Chatterton Mine on Copper Creek but did not develop the property. Boney Ernest and Tom Sun located four claims in 1872 on this property, and Bill Savage took up a fifth claim nearby in 1874. In 1876, these claims were officially surveyed and application was made for patent. However, the parties abandoned their claims and Kurtze Chatterton purchased them several years later (Spencer 1904:12).

In 1874, a man named Harper found copper-bearing float on what became the Doane-Rambler mine at Rambler. He sunk a 10-foot hole, but soon abandoned the property. In 1881, George Doane and associates took up the claim and did considerable development work, sinking a shaft to a depth of 75 ft. This effort represented "the first systematic mining in the district" (Spencer 1906:12) and the earliest mining for copper ores. One source stated that Doane found previous evidence of mining on this claim and two cabins with loopholes cut in the walls for defense. This probably pre-dated Harper's work and suggests early though undocumented mining in the Sierra Madres (Kennedy 1925:69-72).

The Bridger Mine was located in 1876 on the Continental Divide outside the arbitrary district boundaries. Frank O. Williams discovered silver-lead deposits with traces of gold. Williams also discovered the Charter Oak mine which later became one of the better mines in the district (Spencer 1904:13).

No other significant discoveries were made in the district until 1896 when Al Huston and Ben Cullerton discovered free gold in Purgatory Gulch (Spencer 1904:13). This strike spurred outside interest which would soon switch to copper.



The Rudefeha or Ferris-Haggarty Mine

(Sec.16-T14N-R86W). This great copper mine was the premier development in the district, and the fortunes of the Encampment region rose and fell with this mine. It was discovered by Ed Haggarty who had been grubstaked by George Ferris, Robert Deal and John Rumsey. Haggarty actually discovered the lode on June 20, 1897, but did not stake out a claim at that time due to snow cover. He returned on July 25th:

Haggarty at once set up the location stake, erected a monument, and thus took possession, by law, of a 20 acre tract of mining land, which he christened in his location notice as the 'Rudefeha' lode mining claim the name being composed of the two first letters of the name of each of the partners - Rumsey, Deal, Ferris and Haggarty (Coutant 1947:120)

Rumsey's interest was soon bought out by Ferris. In the spring and summer of 1898, Haggarty and party worked the claim and staked out others nearby. A wagon road was cut into the area, a more permanent camp set up and development begun in earnest (Coutant 1947:120-121).

By October 1898, the first load of ore was hauled out to Ft. Steele and the railroad. The first railroad car of ore was sent to the Chicago Copper Refining Company and was found to contain 33.18% copper valued at \$6664 (Junge 1972:8).

In 1899, Ed Haggarty sold his interest in the property for \$30,000 and returned to his native England. George Ferris was killed in a wagon accident in the Sierra Madres. However, the Ferris-Haggerty Copper Mining Company had been formed by Willis George Emerson and Bernard McCaffery in January 1899, and continued to operate after the departure of Ferris and Haggerty. Emerson was a great promoter and was partially responsible for the great rush to the Encampment District. He had an office in Denver to advertise the mine and actually laid out the official Encampment townsite, although structures had already been built on the site in a haphazard manner (Junge 1972:9-10).

The mine was developed in a systematic manner. By 1902 a smelter had been built near Encampment on the west bank of the Encampment River to process the ore. A four mile wooden pipeline was built from a reservoir on the South Fork of the Encampment River (south of town) to supply water to the smelter. A converter was added to the plant facility in 1903, so that 99% pure copper ingots could be produced, thus saving on transportation costs (Beeler 1905:10-11; Junge 1972:11).

Transportation of the ore from mine to mill was streamlined by means of a 16 mile aerial tramway, an engineering feat for its time. One can imagine the logistical difficulties involved in constructing 304 wooden support towers and stringing cable across mountainous terrain over the Continental Divide. Buckets capable of holding 700 pounds of ore each and moving at an average speed of 4 miles per hour were suspended from the cables. At full production, the tramway could deliver 984 tons of ore per day. Three auxillary power stations were built at intervals along the route and all construction was

accomplished in seven months (Beeler 1905:10).

MINING CAMPS IN THE ENCAMPMENT DISTRICT

Duane Smith, in his fine study, <u>Rocky Mountain Mining Camps</u> (1967), discusses a unique feature of the mining frontier urbanization:

For centuries the frontier had been the home of the individualist, where men and women lived their lives in a
basically rural environment. By choice or adaptation these
people had become the cutting edge of civilization; behind
their line of advance grew the refinements of rural life
and the first signs of urban existence. In contrast, on
the mining frontier the camp—the germ of a city—appeared
almost simultaneously with the opening of the region. Individual prospectors or prospecting parties conducted the initial exploration, but their success quickly attracted others
who formed the basis for the nascent community.

The urban nature of the movements increased the speed and direction of development. Within weeks or months, the refinements of civilization appeared to the frontiersman. By visiting the camp, anyone with enough money could secure favors and pleasures which had been denied to earlier frontiers for as long as a generation. Also available were newspapers, recent periodicals, the latest fashions, and new equipment of all types which, together with other similar items, gave the frontier an up-to-date and progressive character. To be sure, this facade could disappear as quickly as it had come, but in the participant and the observer it produced a different reaction to the frontier than would have occurred otherwise (Smith 1967:4-5).

A number of these new settlements or camps developed as a result of the mining activity in the Encampment district. Elwood (Sec.18-T14N-R84W) was considered a transfer point for supplies, mail and passengers traveling west to the Ferris Haggerty Mine from Encampment. During the winter months, it was necessary to transfer from wagon or stage to sleds. Elwood was located about six miles southwest of Encampment on Tennant Creek and was named after Tom Elwood, stage driver. At the height of the copper boom, the population of Elwood approached one hundred and a post office was located there (Junge 1972:13).

The next settlement was known as Battle (Sec.29-T14N-R85W) named for the Fraeb fight in 1841. The site was laid out in 1898 and contained 40 structures, including four general stores, five saloons, livery stables, two hotels, a post office and a newspaper called The Battle Miner. The town acted as a supply point for area mines and a stopover for stage and freight traffic. The two story Hotel de Maine was probably the dominant structure in Battle and was built from sawed lumber instead of logs (Armstong 1935:17).

Persons travelled from Walcott by stage in six-horse Concords. The distance was 24 miles to Saratoga and 44 miles to Encampment. As of 1905, daily stages left Encampment for Battle, a distance of 12 miles, Dillon 19 miles, and Copperton 20 miles (Beeler 1905:5). Battle is little more than a site today, as the Civilian Conservation Corps destroyed the crumbling buildings in the 1930's. A few log cabins still stand and appear to be used as summer homes.

The small town of Rambler (Sec.25-T14N-R86W) grew up around the Doane-Rambler Mine on the west side of the Continental Divide about one and one-half miles west of Battle. Located along a north-south drainage in a meadow north of Battle Lake, the town was used as a stopping place for those en route to the Ferris Haggerty mine and also had a post office. The Rambler camp appears to be the earliest settlement in the district, as the Doane-Rambler was the earliest operating mine.

Copperton (Sec.36-T14N-R87W) was named for the related mining efforts in the area. It was used as a supply point and post office for cattle and sheep operations in the area. It was strategically located near the confluence of Haggarty and Little Sandstone Creeks where the road leading to the Ferris-Haggarty Mine diverged.

The camp of Dillon (Sec.17-T14N-R86W) grew up along this branch, one mile before reaching the Ferris-Haggarty Mine. One explanation for its existance was that saloons were barred from Rudefeha in 1902. However, Beeler's 1905 description indicates that more was involved in its development:

The town of Dillon has an altitude of 9,000 feet, is three-quarters of a mile southwest of the Ferris-Haggarty mine and is the principal supply point of this section. Supply houses, hotel accommodations, livery barn, etc., are located here and a good trade is carried on (Beeler 1905:18).

Dillon was named for Malachi W. Dillon who owned a boarding house in the town. Perhaps the most important feature of the camp was the newspaper, The Dillon Doublejack, edited and written by Grant Jones. Because Jones had previously worked for large newspapers in Chicago, he was able to disseminate information about the mining district over a wide area to "the outside world". Jones had 392 annual subscribers before going to press (12/20/02-first issue) and advertised:

We need postage stamps, express money orders, drafts and checks. For two dollars of any of these we will send the Doublejack for 12 months to anybody anywhere. (Rawlins Daily Times: from Dillon Doublejack Vol.1, No.1-12/20/02).

Sadly, Jones died the following June in a bizarre incident involving the injection of morphine by his cabin mate while Jones was intoxicated.

The end of the line was reached at Rudefeha (Sec.16-T14N-R86W), one mile northeast of Dillon. A sizable community grew up around the tremendous workings at the Ferris-Haggarty. In 1903, 125 men were employed, and in its

peak year, 1904, 200 men were on the payroll (Beeler 1905:17; Junge 1972:18).

WANING DAYS OF THE FERRIS-HAGGARTY MINE

Originally a 250 ft shaft with two levels had produced most of the ore at the Ferris-Haggarty Mine. A tunnel was run 390 ft below the shaft opening along the creek which connected with the shaft, and a 180 ft winze with drifts was dug. The width of the ore vein averaged about 20 ft, and the ore averaged about six to eight per cent copper. The entire mining operation was very efficient:

The ore is stoped out by machine drills, thrown into shoots, cropped to the tunnel level and hauled out by compressed air haulage, seven cars to a train, whence it is dumped directly into tramway ore bins and shipped over the tramway to the smelter (Beeler 1905:17).

The Ferris-Haggarty went through many different ownerships. It was purchased by the North American Copper Company in the fall of 1902 for one million dollars. From 1898 to 1904, the mine produced \$1,400,000 in copper, qualifying it as a legitimate large-scale mine. By December 23, 1904, the Penn-Wyoming Copper Company succeeded North American, but the economic base of the latter had apparently been shaky, and the financial practices of the new owner were questionable. Additionally, the operation had always suffered due to the distance from the railroad. As a result, the Saratoga and Encampment Railroad was built from Walcott but did not reach Encampment until July 18, 1908. The railroad had been an expensive project under the Penn-Wyoming Company and had arrived too late to save the operation (Junge 1972:19-21).

Ownership changed hands once again in February, 1909 when the Penn-Wyoming Company sold out to United Smelters, Railway and Copper Company. By the fall of 1910, the new company went into bankruptcy. The properties went into litigation until foreclosure proceedings took place in 1913. The properties were stripped of their equipment. The demise of the mine that had always been the dominant property in the Encampment district naturally brought about the downfall of the whole region. The smaller mining communities declined and became ghost towns and other copper properties languished.

Failure of the Ferris-Haggarty can be traced to poor financial management and disastrous fires in March 1906 and May 1907 that destroyed the concentratrating mill, power house, boiler room and smelter, all of which had to be rebuilt at great expense because they were under-insured. Perhaps a more important cause was the wild fluctuations and speculation in the national copper market during those years. In 1902, copper prices fell but rose the following year and continued to do so until a decline in 1908, which did not trend upward until 1912. Large sums of money had been spent in developing the mine with a tramway, smelter and concentrator. The absence of a railroad until late 1908 kept transportation costs high. Finally, the mine had limited copper reserves in comparison to some of the really large operations in Montana and Michigan.

With the decline of the copper industry, the area returned to ranching and pastoral pursuits. The communities of Encampment and Saratoga endured, and today attract tourists to the area for fishing, hunting, and general recreation.

OTHER MINES OF THE ENCAMPMENT DISTRICT

Hundreds of mines were located in the Sierra Madres as a result of mineral exploration spurred by the initial success of the Ferris-Haggarty. Some of the more significant properties, described by the U.S. Geological Survey reports in 1904 and 1905, during the district's peak, are mentioned below.

Doane-Rambler Mine

(Sec.25-T14N-R86W). Copper-bearing float was first identified by Harper in 1874 (see background history for details). However, George Doane acquired the property and began actual development work in 1881. The mine was developed by means of a main working tunnel and a 600 ft shaft with numerous levels. The mine had a "complete operating plant" on the surface. Principal copper ores were chalcocite, lesser amounts of chalcopyrite, bornite and covellite. The main ore body was 18 to 30 ft wide (Spencer 1904:61-71). Production figures compiled at the turn of the century showed that the mine had shipped 60 carloads of ore, the last 12 cars averaging 40 to 70% copper. The average value per ton was \$97.68. It was estimated by a mining engineer that the ore dump on the Doane-Rambler contained \$120,000 worth of copper (Kennedy 1925:71).

Charter Oak Mine

(Sec.24-T14N-R85W). This property is located about one and one-quarter miles northeast of the forest boundary, 6-1/2 miles northwest of Encampment. It was discovered by Frank O. Williams and Henry Jones and sold to the Charter Oak Company. It was developed by a 488 ft shaft with 300 ft of drifts. A second shaft was sunk south of the main shaft in 1905. The vein consisted of quartz carrying copper and iron. One carload of copper ore had been shipped from the mine in 1900 (Spencer 1904:82-82; Kennedy 1925:71). Its chief historical significance lies in the fact that it was one of the earliest properties discovered in the district.

Bridger Mine

(Sec.2-T15N-R87W). Located northeast of Divide Peak, this property was discovered by Frank O. Williams in 1876. Principal values at that time were in lead-silver with some gold. Williams did a good deal of development work, but the quartz veins were numerous and quickly disappeared when followed. Assays varied widely from a trace to 69 ounces of gold/ton. This mine also represents one of the earliest mining efforts in the Sierra Madres (Spencer 1904:99-100).

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(Sec.29-T14N-R84W). First noted by J.W. Southwick in 1868, the mine was actually worked by Boney Ernest and Tom Sun in 1872. Kurtze Chatterton relocated the abandoned property several years later and began the "first serious attempt to develop mineral resources in Sierra Madres" (Spencer 1904:12, 95-96).

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(Sec.12-T13N-R84W). This property was developed by a tunnel 425 ft long and a shaft 100 ft deep which were planned to eventually join. The vein, as wide as 24 ft, was composed of chalcopyrite carried in quartz and feldspar (Spencer 1904:96-97). This property appears to be on Forest Service land.

(Sec.14-T13N-R85W). The Itmay was developed by a 100 ft shaft equipped with a steam hoist. The shaft exposed a 12 ft vein carrying chalcopyrite, the principal copper ore. One assay sample showed 17.92% copper and \$1 gold/ton (Spencer 1904:97). The Itmay appears to be on Forest Service property east of Huston Park.

Verde or Hinton Mine

(Sec.29,32-T13N-R85W). This mine was described as "the most prominent" property south of the town of Battle. A vein exposed on the surface was developed underground by a shaft equipped with a steam hoisting plant. The shaft was at least 110 ft deep and exposed a vein carrying chalcopyrite as the principal copper ore (Spencer 1904:97-98; Beeler 1905:13).

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(Sec.26-T15N-R87W). The Syndicate was developed by means of an inclined shaft 135 ft deep with a 35 ft drift to follow the vein. The vein was composed of quartzite and calcite carrying chalcocite, the copper bearing ore (Spencer 1904:88-89). Forest Service correspondence from Evan J. Williams, Senior Forest Ranger, dated December 8, 1933, indicates that a large smelter was built on the site but never put into operation. Because of the nature of the terrain, the equipment was never removed. According to Richard Cerise, Forest Technician (Encampment District), Williams was referring to the Syndicate Mine. It is unlikely that a smelter would have been built at such a mine site due to the great expense, but some type of significant mining equipment may remain on the site. It appears that the mine is located on private property.

Leighton-Gentry or Jack Creek Mine

(Sec.5-T14N-R86W). This property was developed by an inclined shaft 150 ft deep which exposed a vein averaging 11 ft in width composed of quartzite carrying pyrite, pyrrohotite and chalcopyrite. Assay samples showed 30% copper (Spencer 1904:87-88). A considerable amount of patented mining claims appear in this area, which is surrounded by Forest Service lands.

Jesse Mine

(Sec.9-T12N-R84W). This mine was also known as the Scott and showed "encouraging indications of copper ore". However, only limited development work had been conducted on the property by 1904. This mine is located on Forest property southeast of Hog Park Reservoir (Spencer 1904:40,46).

Creede, Island City and Lucky Find Mines

(Sec.10-T14N-R86W). These three claims are located in close proximity northwest of Bridger Peak. The principal vein developed by each carried pyrrhotite from which copper, nickel and some cobalt was extracted. Each mine was developed by a shaft, with two on the Island City (Spencer 1904:86-87). They were located near the wagon road from Rudefeha to Saratoga on what appears to be Forest Service property.

Carbondale Mine

(Sec.18-T13N-R87W). Located near Stemp Strings, this coal mine was developed to serve the Ferris-Haggarty mine. Coal was also sent by tramway to be used at the smelter in Encampment. The coal was described as "bright, clean and noncoking" (Spencer 1904:17). According to James Blackhall, Forest Supervisor, the coal was only used in 1903 and 1904 when mining ceased. Some of the land was then taken up by the Louis Larson sheep outfit (Blackhall 1915: 9). A portion of this tract still appears to be private property.

Hidden Treasure Mine

(Sec.28-T14N-R85W). Located east of the Battle townsite, the mine was developed by means of a 720 ft tunnel which hit a well defined vein at 575 ft from 4 inches to 2-1/2 ft in width. The vein was composed of quartz, calcite and siderite carrying chalcopyrite, chalcocite and malachite. An assay sample returned 3/10 of an ounce of gold/ton (Spencer 1904:93-94).

Gertrude Mine

(Sec.29-T14N-R85W). Located west of the Hidden Treasure, the Gertrude was developed by means of an inclined shaft 80 ft deep which exposed a quartz vein 2-1/2 to 9 ft in width. The ore returned \$7/ton in gold. At the time of Spencer's survey, the mine was still being developed and copper values

were still undetermined (Spencer 1904:92-93).

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(Sec.29-T14N-R85W). These two adjoining claims just southwest of Battle were developed by three shafts with crosscuts to intersect and follow a quartz and calcite vein carrying chalcopyrite and hematite (Spencer 1904:90-92). These claims appear to be in an area of private patented mining claims surrounded by Forest Service lands.

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(Sec.18-T14N-R85W). Located near Silver Lake, the property was developed by means of a tunnel. A six foot wide quartz vein was struck which carried copper pyrite. A discovery pit had originally found a 2 to 4 foot vein near the surface (Spencer 1904:90). The Continental appears to be a private patented mining claim within the Forest.

Sun Anchor and Sweet Claims

(approx. Sec.1,2-T13N-R85W). These claims were largely undeveloped and located on the north face of Green Mountain. Apparently a vein near the surface carried copper ores in the form of magnetite and chalcopyrite (Spencer 1904:94-95). In addition to these claims, the Sweet and Chicago Venture mines were located in the vicinity near Green Mountain Falls.

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The core of the North Laramie Mountains is composed of coarse-grained granites of the Precambrian age. Laramie Peak is the dominant topographic feature rising to 10,272 ft, approximately 1000 ft higher than the next highest peaks. The range is rugged with narrow ridges and broad gullies and valleys with steep gradients (Segerstrom and Weisner 1977:B2; Spencer 1916:52).

Although the region has experienced prospecting for mineral deposits throughout recent history, none of the efforts was particularly profitable. According to Arthur C. Spencer:

Evidences of prospecting, assigned by local tradition to the period immediately following the discovery of gold in the Cherry Creek and Pikes Peak districts in Colorado, are to be noted from place to place within the area of crystalline rocks lying northwest of Laramie Peak. Stories of gold having been won by individuals and of lost mines are current, but no printed records are known to justify the belief that there has ever been any production worthy of mention (Spencer 1916:56). A pocket of gold ore was discovered in the 1890's near Warbonnet Peak which caused increased but short-lived activity near the head of LaPrele and LaBonte Creeks. Nothing resulted from these efforts. General prospecting began around 1875, and continued with a concentration on copper ores after 1900 (Spencer 1916:56-57).

Through local usage, the following mining districts were developed (see Figure 10):

- 1) Spring Hill or North Laramie Peak District, also known as Esterbrook District near the Esterbrook townsite.
- 2) Warbonnet District at the headwaters of LaPrele and LaBonte Creeks.
- 3) Deer Creek District in the country drained by Deek Creek.

The principal mines of the Esterbrook District were the Esterbrook, Three Cripples, and Maggie Murphy. Lesser developments were the Big Five, McGhee, Tenderfoot and Kreisley. The northern portion of the district is outside the Forest boundary.

Esterbrook

The Esterbrook mine is located just south of the Esterbrook townsite on the Douglas claim and was first developed by the Boston-Wyoming Copper Company with hoists and boilers. It was the most extensively developed mine in the region. It was studied by Henry L. Beeler, State Geologist, in 1902 during its early exploratory phase (indicating a discovery date shortly before that time). In 1902, 50 tons of ore were mined with an average value of \$15/ton. Additionally, 35,588 pounds of hand-sorted ore contained 1.3 ounces of silver/ton; .03502 ounces of gold/ton; 34.65% lead; 34% silica; 7% iron. The main shaft was 350 ft deep with two drifts. The main ore body was a "...nearly vertical tabular body of quartz and calcite carrying lead carbonate at the outcrop and galena below" (Spencer 1916:63-64).

Three Cripples

A shaft on this property was sunk to 95 ft in 1905. An analysis of the dump showed massive pyrrhotite rock carrying iron and copper. No gold or silver were detectable. There is no record of any production from the mine. A shaft house and a cabin were on the property in 1916 (Spencer 1916:62).

Maggie Murphy Group

These claims were located about two miles south of Esterbrook townsite in Sec. 21 and 22. The claims were staked in 1903. Prospectors were attracted to the area by outcrops of limonite-stained schist carrying copper. One shaft was sunk to a depth of 107 ft and numerous pits were dug along several hundred feet of a northeast-trending mineralized belt of pyrrhotite. The State Geologist also visited the workings in 1902 and outlined an exploratory

Figure 10.

LARAMIE PEAK MINING DISTRICT

SOURCE: Spencer 1916

program for extracting copper. No production is recorded. Spencer relates that "...at the time this property was being prospected several buildings were erected which are still in good condition. The wagon road from Esterbrook, though now in rather poor shape, could be repaired with slight expense" (Spencer 1916:61).

The <u>Big Five</u> shaft was located about 2500 ft NNE of the Three Cripples shaft and sunk to a depth of 50 ft. About 1200 ft north of the Big Five was the <u>McGhee</u> shaft. The <u>Tenderfoot</u> was located about one-half mile NNE of the <u>McGhee</u>. These minor operations represented attempts to follow mineralized belts. The <u>Kreisley</u> group of claims near the Converse-Albany County lines in Sec. 2-T28N-R71W and Sec. 35-T29N-R71W was developed by means of two shafts exposing large bodies of pyrrhotite containing copper. No production figures are noted by Spencer in 1916.

The Warbonnet district is comprised of mining locations near the head of LaBonte Canyon and Warbonnet Peak. Efforts in this district were directed toward the extraction of copper ores. The major developments consisted of the Pyramid Mine, the Copper King, and the Oriole.

Pyramid

(NW/NW Sec.23-T28N-R74W). The major veins, known as the Pyramid and the Mammoth, were developed at different times by the Pyramid Copper Company, the LaBonte Mining Company, and the Mammoth Mining and Milling Company. As of 1916, the LaBonte Mining Company had taken over the operation of the Pyramid workings. The principal shaft was sunk approximately 100 ft and was equipped with a steam hoist. A second nearby shaft was 30 ft deep and ore on the dump showed 5 % copper. The Pyramid vein was composed of quartz carrying limonite. The Mammoth vein was composed of a dense body of quartz up to 200 ft in width. It was developed by one shaft in 1916 (Spencer 1916: 72-73).

Copper King

And the second second

(SW 1/4 Sec.12-T29N-R75W). The Douglas Mining and Milling Company developed the Copper King and four other claims in 1902 and 1906. Once again, a large quartz vein was discovered carrying oxidized copper minerals in abundance near the surface. The discovery shaft was located on a hill slope 175 ft above the creek bottom. Two tunnels were also dug, each 600 ft long. A 50 ton lot of ore was taken from the workings. Ore on the dump assayed at 15% copper, and some assays showed .35 ounces gold/ton (Spencer 1916:74-75).

Oriole Mine

(SE 1/4 Sec.10-T29N-R75W). This development was located about one mile northwest of the Copper King among a series of workings stretching for a mile or more along a mineralized belt. The Oriole mine is on this belt and was developed around 1900. A dense quartz vein 20-30 ft wide was developed by two shallow shafts about 800 ft apart. Small amounts of copper were

found. Further development work on crosscuts led to the flooding of the workings so that mining had to be discontinued as of 1916. Spencer states that "...the Oriole property comprises several good houses. It is accessible by a good wagon road either from the north or from the south" (Spencer 1916: 76).

The other minor workings in the vicinity were the Brenning claim (T28N-R76W, in the vicinity of Sec.1,2,11,12) and the Perry claims (Sec.33-T29N-R76W). Neither claim had any record of production.

DEER CREEK DISTRICT

The Deer Creek District roughly encompasses the area between Boxelder Creek and the western boundary of Converse County and contains the Swede Boy, a chromite development, Morman Canyon prospects, and the Martin Smith Copper prospect, all of which were small operations.

The Swede Boy

(Sec.21-T31N-R77W). This copper mine was developed by an inclined shaft on a quartz vein. Some copper was shipped, but the shaft house and mining plant were destroyed by fire about 1913.

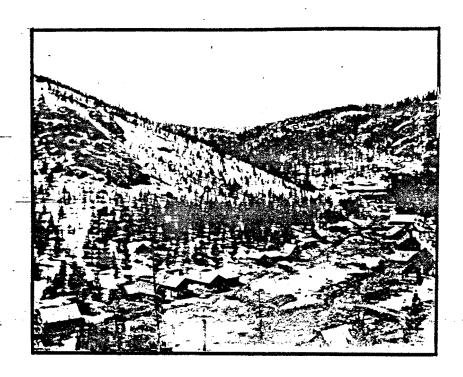
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(Sec.12[?]-T31N-R76W). A deposit of chromite was worked in Deer Creek Canyon in the early 1900's by the Chromium Mines Company. Ore was shipped from Glenrock to Chicago by railroad which contained 35% chromic oxide (Spencer 1916:77-79).

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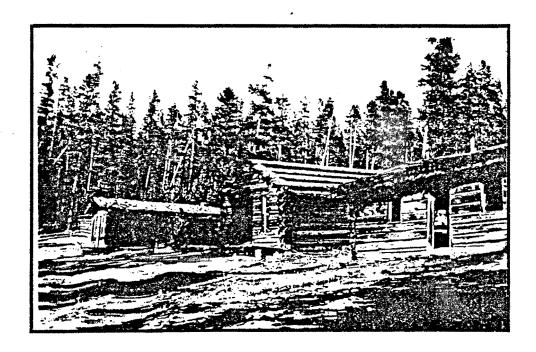
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Keystone mining community in 1906; forest fires and indiscriminate cutting have taken their toll on the slopes above the mining camp.

(Medicine Bow Collection - American Heritage Center)



Holmes Mining Camp The buildings have been removed, and the site is now the Holmes Campground. (Medicine Bow Collection - American Heritage Center)

TRANSPORTATION

Most of the road systems used today in the Medicine Bow National Forest are improvements upon and variations of old Indian and emigrant trails, such as the Overland, Cherokee, and Lodgepole Trails. The era of tie hacks and miners saw the development of a crude road system in the late 1800's, but it was not until the recreation potential of the National Forests was recognized in the late teens and early twenties that intense road development occurred in the Forests. Fire prevention was another motivating force in the construction of interior Forest roads. According to a recent U.S. Forest Service publication, there are now 3,452.7 miles of roads in the Medicine Bow transportation system, excluding Thunder Basin National Grassland (see Figure 11) (Management Situations, Medicine Bow National Forest 1980:7).

EARLY ROADS AND FOREST ROAD DEVELOPMENT

The Cherokee and Lodgepole Trails were two of the oldest transportation routes to pass in or near the Forest (see Historic Setting). There were several variations of the Cherokee Trail; one major route skirted the Medicine Bows to the south, the other to the north (partially coinciding with the Overland Trail). Parts of the southern route appeared on GLO survey maps as early as 1870. It entered Wyoming from Colorado at about the same location as Route 230, but diverged from and paralleled it to the south up the North Platte River Valley. It crossed the Encampment River near Riverside, and continued northwest to Twin Groves (Sec.15-T16N-R87W), where it joined the northern route and continued west to Big Springs and Powder Springs.

The northern variation of the Cherokee Trail passed near Tie Siding and headed toward Sheep Mountain, where it split. One branch headed north to McFadden, then southwest to Arlington, crossing the drainages flowing north out of the Medicine Bows. It crossed the North Platte at the mouth of Lake Creek, then proceeded up Jack Creek to Twin Groves, joining the southern route. The other variation appears to have entered the Forest near Centennial, skirted the range to the north, and descended to the North Platte Valley via Pass Creek (Coughlin's Historical Notes; Medicine Bow Collection, Box 9).

On September 20, 1858, the Army established Camp (Fort) Walbach near Lodgepole Creek (elevation 6927 feet) to protect the emigrants from Indian depredations. Camp Walbach was located east of Cheyenne Pass, approximately 20 miles northwest of Cheyenne and 10 miles east of the northeast corner of the Pole Mountain District. It was officially abandoned on April 19, 1859,

and in 1916 a state monument was erected near the site (Annals of Wyoming, Vol.28, No.1:74). The Lodgepole Trail entered the Forest at the east boundary between Sec.12 and 13-T14N-R71W. It generally followed the route of the present Forest Road #712 (Telephone Road) west and slightly south through the Pole Mountain District to its junction with the Happy Jack Road near the old ski area. It continued up the ridge north of the head of South Pole Creek, passing the site of Tie City (Sec.23-T15N-R72W). It then crossed Telephone Creek Draw just south of the junction of the Happy Jack Road and the Lincoln Highway. It continued up a shallow draw, crossed a ridge south of Telephone Canyon (wagon ruts were reportedly still visible in Casper limestone on the west slope of this ridge), and finally joined the Overland Trail west of Laramie (Coughlin's Historical Notes; Medicine Bow Collection, Box 9, "Transportation").

Pole Mountain Branching off of the Lodgepole Trail was the Old Sherman Road. It left the Salt Lake Stage Road (Lodgepole Trail or Cheyenne Pass Road) about one quarter mile east of the crest of the Laramie Mountains, in the SW1/4 of Sec.22-T15N-R72W. It headed south-southeast along the southwest corner of the Forest to the site of Sherman, a tie camp used to supply ties for the Union Pacific Railroad (SW1/4 Sec.3-T14N-R71W). It continued south to Virginia Dale. Parts of this road appeared on the GLO survey maps from 1871-1874. The consequence of the part of the p

A number of timber roads were used in the Pole Mountain area to service the tie hacks supplying ties for the Union Pacific Railroad. Numerous unlabelled roads at the southern end of the District appear on GLO surveys from 1871, and were undoubtedly used for lumbering.

A slightly later route through the Pole Mountain District connecting Laramie and Cheyenne was the Happy Jack Road. Named for Jack Hollingsworth, the route diverges from the Lodgepole Trail near Tie City in the northwest part of the District and swings southeast through the Forest, passing through the northeast corner of the old Ft. Francis E. Warren Target and Maneuver Reservation. It leaves the Forest at the east boundary in the SE1/4 Sec.12-T14N-R71W. Hollingsworth had a ranch near the foothills of the Laramie Range in the 1880's, and hauled wood from the mountains to sell in Cheyenne. He reportedly always sang as he worked (Writer's Program of WPA 1941:251).

In the 1920's, as the Forest was developing its recreational potential, maintenance and improvements were made on the roads of the Pole Mountain Division, including the Happy Jack Road, the Telephone Road (Lodgepole Trail). and the Vedauwoo Glen Road (USFS Memo; Medicine Bow Collection, Box 9, "Transportation").

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The Snowy Range Road (State Hwy. 130) from Laramie to the North Platte River was and still is the major east-west route through the main Medicine Bow Forest. The General Land Office (GLO) Survey plat for Township 16

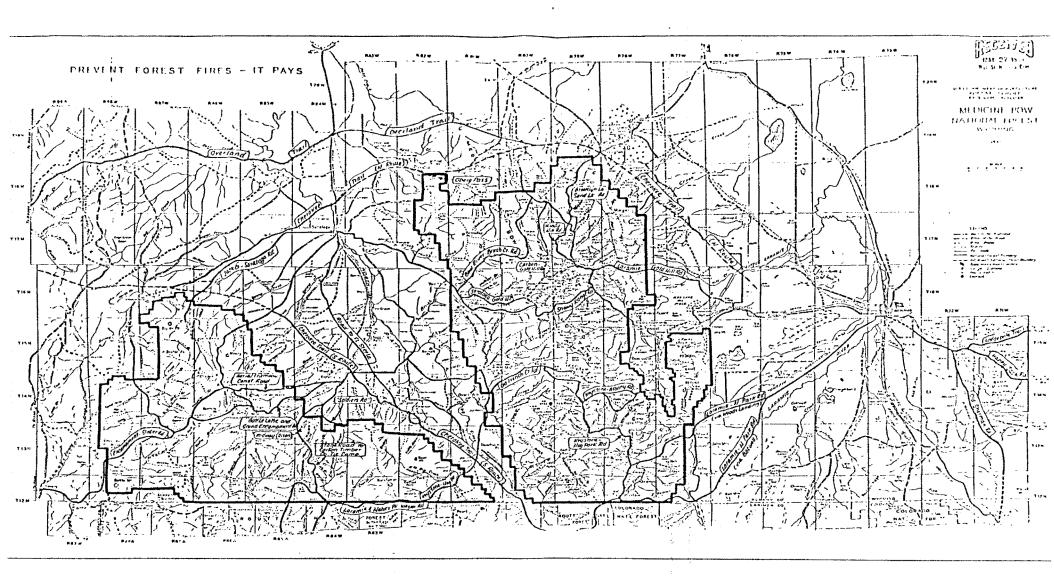


Figure 11.

EARLY TRANSPORTATION ROUTES
OF THE MEDICINE BOW NATIONAL FOREST

SOURCES: General Land Office Survey Maps; Medicine Bow Collection North-Range 78 West, surveyed in 1877 and 1879 by William Downey, shows a "Range Road" leaving from a point near Centennial, crossing Libby Creek in Sec.28, and continuing along the north side of Libby Creek. The GLO survey plat for Township 16 North-Range 79 West, surveyed in 1898, shows a continuation of this road labeled "Centennial to LaPlata" which generally followed the route of the present highway and ended in the NWI/4 Sec.16. The earliest uses of this road were for timber and mining. The 1877 GLO plat for Township 16 North-Range 78 West shows a "Webber's Sawmill" in the SEI/4 Sec.33 (the approximate location of the present Centennial Ranger Station), indicating very early use of the area for timber production. Early tie camps were located along Libby Creek, Nash's Fork, and the North Fork of the Little Laramie. The route was used in connection with mining during the Gold Hill mining booms. There was also some mining activity around Libby Flats, formerly called LaPlata.

According to a May 5, 1908 letter from Fred A. Miller (president of the Laramie, Hahns Peak and Pacific Railroad) to Forest Supervisor Nelson, Miller's mining company constructed a wagon road in 1900 from Gold Hill east to Centennial (a distance of 18 miles) for freighting supplies between Gold Hill and Laramie. However, a few years before the letter was written, he claimed windstorms had uprooted trees across the road, which became badly washed out and unusable. A second Gold Hill mining rush, expansion of Forest grazing and the appearance of the automobile all proved the need for an improved road through the Forest.

In 1909, Forest Supervisor Lovejoy requested \$1,500 from the Regional Forester to cooperate on road improvements with the Albany County Commissioners and the Centennial Commercial Club. A combined total of \$2,500 was raised, and the LHP&P agreed to survey the Centennial-Snowy Range Wagon Road (Coughlin's Historical Notes; Medicine Bow Collections, Box 9, "Transportation"). Work was under the general supervision of Major F. Reed, who had an interest in the Van Horn-Miller syndicate that promoted the LHP&P Railroad. This syndicate established a bank, newspaper, hotel and country club at Centennial. In 1910, the first recorded auto trip took place between Centennial and Brooklyn Lake. Elmer Lovejoy drove a 1910 Franklin to Brooklyn Lake on Labor Day. The nine mile trip took one hour. (Coughlin's Historical Notes; Medicine Bow Collections, Box 9, "Transporation").

According to George A. Duthie (the fifth Medicine Bow National Forest Supervisor) in his history "The Medicine Bow National Forest 1913-1916", the Forest began to develop its recreational potential in 1914. A reconnaissance was made in early 1915 by Fred Morrel and W.E. Palen (of the Denver office) and Supervisor Duthie for a route from Centennial to the Saratoga Road via Lake Marie and Brush Creek. The location survey was conducted by W. Fullerton of the Forest Service, and with \$500 from the County, Forest, and local residents, a rough but drivable road was constructed to Brooklyn Lake and Libby Flats. Also in 1915, \$1,000 funded by the County and Forest covered the cost of improvements near the Nash Fork Crossing, under Frank B. Notestein. In 1916, Albany County appealed to the federal government for assistance under the Shakelford-Bankhead Bill for road construction; however, a few more years went by before further major work was done.

A 1918 editorial predicted that the Snowy Range area would become one of the greatest pleasure resorts of the Rocky Mountains:

It has been inaccessible in the past, but the Forest Service is developing it in many ways. At present, the greatest need is a good road leading from Centennial with the base at Medicine Bow Peak and then on down to the Platte on the other side...The Forest Officers are willing and anxious to give the patrons of the government good service, but have been prevented because of lack of funds. Roads cost money (Laramie RepublicanBoomerang 8/7/18).

A Forest Service memo of 7/10/19 reflected these sentiments, claiming the current "wagon road" was not suitable for auto travel, and that the people of Albany County demanded a good road. Not only was such a road important for recreation, but it would be valuable to the Forest for administrative purposes, beginning a system of proposed roads to open the north end of the Forest. Supervisor Pierce emphasized the need for good roads for fire protection.

In 1919, Engineer Gumaer conducted a comprehensive road survey to establish construction priorities. The nine mile stretch between Centennial and Brook-lyn Lake was given a high priority ranking; the cost estimate was \$30,000. The project was approved by the Secretary of Agriculture in late 1919, with Albany County providing half the funds. Construction took place in the early 1920's by the Bureau of Public Roads under Engineer S.A. Wallace. The successful bidder for the project was the firm of Peterson, Shirley, and Gunther of Denver.

The high quality of the newly constructed road from Centennial to Brooklyn Lake highlighted the poor conditions of the other segments, and a push was made to connect the first segment with the west side of the range. In 1922, a USFS letter to the Cheyenne Tribune announced that it was now possible to reach Brush Creek and Medicine Bow Lodge from the west via the new Brush Creek-Headquarters Park Road. The Forest hoped to receive funds to extend the road from Headquarters Park (near Gold Hill) to Lake Marie to join the east and west segments. In 1923, Albany county appropriated \$5,000 and in 1924-25, the Brooklyn Lake-Headquarters Park segment was constructed. Dedication of the Snowy Range Road was held in July of 1926 (Rawlins Reporter 7/6/26).

In 1930, the route from Laramie to Saratoga was designated as a Forest Highway. The Bureau of Public Roads maintained the road and blacked out the section from Laramie to Centennial in 1932-33. During that decade, the entire route was black-topped. During the mid-to-late nineteen sixties, both ends of Route 130 were improved with the western terminus changing from Saratoga to Days, and the eastern end following Nash Fork rather than the original route up Libby Creek (now known as the Barber Lake Road).

Another important early road system in the area included the Laramie to North Park routes, via Boswell and Woods Landing. Pieces of these roads appear on the original GLO survey plats and on William Owen's 1886 map of

Albany County. The first major route headed southwest out of Laramie, crossed the Big Laramie River at Riverside Ranch, continued southwest across Township 13 North-Range 76 West, and again crossed the Big Laramie at Boswell Ranch. It then proceeded up Boswell Creek, turned south across the state line near Mountain Home, and followed the present Route 230 through the neck of the park into Walden (Coughlin's Historical Notes; Medicine Bow Collection, Box 9, "Transporation"). According to a letter written by a Forest Ranger in 1923, the Boswell-Mountain Home Road was used extensively by Mormons crossing the Range to reach Salt Lake.

The Woods Landing-Mountain Home Road (present Route 230) cut off 14.2 miles from the original Laramie-North Park Road. The portion of this route between Woods Landing and Chimney Park was built by Sam Woods, an early saw miller. This route was used as a stage road with daily service between Laramie and North Park until around 1910 when the railroad reached Walden. tions were established every twelve miles, and Woods Landing was one of the major stops. There was also a route between Woods Landing and the Boswell Ranch, via Jelm, that followed the Big Laramie and was used as a daily stage route. Around 1908-1912, when autos were first used, the original Boswell Route was more popular, and the Woods Landing Route was used only by wood haulers. Between 1910 and 1920, however, autos were not yet widely used. The railroad took care of most traffic, and funds for road building or maintenance were difficult to obtain. The stretch between Chimney Park and Woods Landing needed improvement because of the very steep Telephone Hill just outside of Woods Landing and the alternative of Porter Gulch, which was less steep but always washed out. In 1915, Jonas Bergland requested the improvement of that segment for hauling salt to permitted cattle on the Foxpark District and hauling wood products to ranchers. Forester Louis E. Coughlin, in a memo of 9/5/16, also recommended that the road up Woods Creek be improved. In 1917, funds were scarce. Medicine Bow was allotted \$1,800 for improvements, which was authorized by Chief of Operations Fred Morrell for the Woods Creek Road. The original survey was conducted by Walter E. Zipfel, who estimated the cost of a 16 foot road 7.05 miles long (Woods Landing to Chimney Park) at \$10,046.25. Bids submitted were too costly, and the project was dropped. Two years later, the Woods Landing-Mountain Home Road, including the above 7.05 mile segment, was approved for survey. A cooperative agreement was reached with the state, county, and Forest in May of 1919, and within a few years the road became part of the Rocky Mountain Highway.

Around this same time, the Woods Landing Road No. 311 (formerly 588) was constructed. This route, leaving Route 230 north of Woods Landing near the crossing of Fox Creek, heads northwest to a point two miles east of Albany. It was overlooked by Engineer Gumaer in 1919, but was laid out in April 1925, by Raymond U. Harmon and Donald E. Clark of the Forest Supervisor's Staff. Construction of the 7.6 mile long road was under the supervision of Jack B. Cannann (Coughlin's Historical Notes; Medicine Bow Collection, Box 9).

Four of the earliest roads on the Medicine Bow were instigated by the Gold Hill mining boom of the late 1880's. In 1889, four towns began construction in late October (at the height of the rush) on roads leading to the district. The Laramie-Gold Hill road followed the Middle Fork of Mill Creek, passed through the northern sections of Township 16 North-Range 78 West, and used

old tie roads extending several miles up Mill Creek. At 10,000 ft they cut a new road through three miles of lodgepole timber. The road was then constructed over a saddle, free of timber, between the North Fork of the Little Laramie and the head of Rock Creek. It turned south toward Brooklyn Lake and around the southern end of the high peaks of the Snowies to Gold Hill. The road was built under the direction of Jonus H. Farr (Medicine Bow Collection, Box 9). A group from Arlington under the direction of Alvy Dixon raced toward Gold Hill via a ridge north of Rock Creek from Arlington to Sand Lake, passing Windy Hill on the west and thence to Gold Hill (Sec.9-T16N-R80W). This route was known as the Windy Hill Road. Coal miners from Carbon headed toward Gold Hill by way of the Medicine Bow River, entering the Forest near the Bow River Station. From old maps, it is difficult to tell whether the Bow River Road reached its destination. The endeavor was described as having been a good idea with faulty execution. The group from Saratoga won the race, arriving at Gold Hill before their competitors via the Saratoga-Gold Hill Road. The route involved a shorter distance and easier terrain, but more snow. Approximately 12 miles of the road was cut through timber at elevations ranging from 8100-10,000 ft (Coughlin's Historical Notes: Medicine Bow Collection, Box 9, "Transportation").

The "Old French Creek Road" appears on GLO survey plats (Township 15 North-Range 79 West) from 1877-78, surveyed by William O. Downey. During the late 1890's when a smelter was planned at Encampment, a wagon road was built from the Rambler mine in the Keystone Mining District to Encampment. The road followed the divide between North and South Mullen Creeks, then proceeded across North Mullen Creek to French Creek. It crossed the North Platte at the Sanger Ranch (then the Jackson Brown Ranch), and thence to Encampment. This was a cut-off from an earlier road that went south to the A-A Ranch. The purpose of this road was to haul ore from the Rambler Mine to the Encampment smelter (Coughlin's Historical Notes; Medicine Bow Collection, Box 9, "Transportation").

Roads were built in several directions from Keystone, the center of the mining activity. A road was built in the 1870's from Keystone to Hog Park by Mortimer N. Grant, a pioneer mining engineer and surveyor. It followed the Old French Creek road for part of its route: from the mouth of Dave Creek north of Keystone, northwest to the head of South Mullen Creek, then down the ridge between South and North Mullen Creek. Then, instead of swinging north toward French Creek, it headed south to the A-A Ranch (NW/NW Sec.26-T14N-R81W), crossed the North Platte, and thence south to Big Creek. It continued up Big Creek to a ridge south of the Middle Fork of Big Creek, along the state line via Damfino Creek into Hog Park. Until the 1890's, this was one of the two roads from the Little Snake River to Laramie, and was shorter than the North Park Road.

A wagon road was also built east from Keystone to Albany in the 1880's to serve the Douglas Creek mines. William Owen's 1886 map of Albany County shows the road from Albany heading southwest through Sec.15,22,21,29, then swinging northwest through Sec.19 and 18 (T14N-R78W), then west and southwest into Keystone. As of 1905, there was daily service on the Holmes-Laramie Stageline. The route was 45 miles long via Centennial; the fare was \$3.50 (Beeler 1905:5).

The Albany-Keystone Road received low priority (eighth) in Engineer Gumaer's 1919 survey, as the Snowy Range Road was receiving priority at that time. In 1928, a bid was awarded to Edward and Earl Hicks on a 2.8 miles stretch west from Albany. Bid price was \$7,839 "to get up the hill". the next construction in that area was carried out by the CCC camps in the 1930's. In 1934, under the direction of Theodore Bernstad, road improvements were continued, and by 1938, there was a high standard road from Albany to the Platte River Bridge (Coughlin's Historical Notes; Medicine Bow Collection, Box 9, "Transportation").

Improvements on the road between Holmes (north of Keystone) and French (just west of the forest boundary near French Creek) were also low on Engineer Gumaer's priority list; however the French Creek fire of 1930 provoked action in that area (Coughlin's Historical Notes; Medicine Bow Collection, Box 9, "Transportation").

Because of the mining activity in the Keystone area, a number of roads were built throughout the region. The old Lewis Road crossed Lake Creek into Hay Park, thence to Muddy Creek one-quarter mile above the location of the Wyoming Timber Company store. Another road came down part of Lake Creek, crossed Douglas Creek near Roper's place (Sec.10-T13N-R79N), then continued up Douglas Creek to Keystone. The first machinery for the Keystone mines was reportedly transported over this route. Yet another old road branched off from the Keystone-Albany Road two miles east of Keystone, crossed the Little Beaver, and headed north up one of its branches over into Douglas Creek, then up Davis Gulch over to Mullen Creek and on to Saratoga (Coughlin's Historical Notes; Medicine Bow Collection, Box 9).

In 1920, the Forest Service requested approval for construction of a number of connecting roads in the Forest. One of these was for a five mile stretch called the Chimney Park-Foxpark-Bear Gulch Road, to insure connection with the new Woods Landing-Mountain Home Road. Because of poor railroad service, a good road was needed for hauling lumber and ties. Estimated cost of construction was \$8,058.60 (USDA Report 1920; Medicine Bow Collection, Box 9, "Transportation"). Because this route (the east-west section between Foxpark and Chimney Park) does not appear on later maps, it is questionable that this stretch was constructed. Also in October 1920, the Forest Service proposed construction on a road eleven miles long from Keystone to Foxpark, at an estimated cost of \$15,884.38 (USDA Report 1920; Medicine Bow Collection, Box 9, "Transportation").

In the northern part of the Forest, plans were made for a road from Brooklyn Lake to Sand Lake. This road would pass Windy Hill to the east. Eventually there would be two connecting roads on the north: one from Sand Lake to the Bow River Ranger Station, and one from Sand Lake to Arlington. The estimated cost for the eight mile stretch from Brooklyn Lake to Sand lake was \$10,733.14 (USDA Report 1920; Medicine Bow Collection, Box 9, "Transportation"). One of the earliest roads in that area was the White Rock Canyon Road, constructed in 1879 by the Hardens (Coughlin's Historical Notes; Medicine Bow Collection, Box 9, "Transportation").

In the extreme northwest corner of the main Medicine Bow Forest, plans were made for a six mile stretch (two miles of which were in the Forest) of road

over Oberg Pass to insure good connections with existing roads. The western terminus of this road was to be the northwest corner of Sec.4-T18N-R82W, the eastern terminus, the northeast corner of Sec.6-T18N-R81W. The estimated cost was \$8,984.69, and it was expected to save 30 miles between Laramie and Encampment, since the Snowy Range Road had not yet been completed (USDA Report 1920; Medicine Bow Collection, Box 9, "Transportation").

Another report was prepared for the construction of a road from the Bow River Ranger Station on the north to the Brush Creek Ranger Station on the south. The twenty-three mile long road was estimated to cost \$40,470.92, and would proceed via Long Lake, Turpin Park, Cecil Park, North Brush Creek, and Mullison Park (USDA Report 1920; Medicine Bow Collection, Box 9, "Transportation"). Although this road was eventually built, it does not appear on Forest maps from 1930 or 1940.

Numerous timber roads appear throughout the main Medicine Bow on GLO survey maps from the late 1800's. Some of these were later developed into recreational roads still in use, and many have simply disappeared. Some of these timber roads were located in the northeast portion of the Forest in the vicinity of Mill Creek, Sevenmile Creek and Fourmile Creek.

A great deal of road construction and maintenance occurred during the 1930's and early 1940's through the Civilian Conservation Corps program (see section on CCC).

Sierra Madres

The earliest roads in the Sierra Madre region served the mining and timber industries. According to E.C. Peryam in a newspaper article in 1934, there was an old wagon road connecting a fort near Encampment with a lumber camp seven miles up the Encampment River. The fort was reportedly built in the 1860's to protect loggers supplying the Union Pacific Railroad and Ft. Steele from hostile Indians. The site was described as being about 3/4 miles above the present town of Riverside. About 3/4 miles west of the fort was the Soldiers Road, a wagon trail used by the government in the 1860's to supply the logging camp established to provide lumber for building Ft. Steele (other accounts indicate that Elk Mountain was the source of wood for construction of Ft. Steele). The camp was supposedly situated seven miles up the Encampment River from the fort, in the Encampment canyon on a small flat at the mouth of Soldier Creek. The road, however, took a roundabout route 12 miles long, staying on high ground to avoid capture by Indians (Peryam, newspaper article dated 11/29/34). A road possibly fitting this description appears on a 1919 Forest Service map, but neither the wagon road, lumber camp, or fort appeared on the GLO maps surveyed in 1889.

One of the earliest roads into the region was the Keystone-Hog Park Wagon Road, built around 1879 by Mortimer N. Grant (discussed earlier). This road swung south to Hahn's Peak after leaving Hog Park, connecting that mining community with Keystone and Laramie (Coughlin's Historical Notes; Medicine Bow Collection, Box 9, "Transportation").

The earliest serious mining activity in the area occurred in 1881 at the

Doane-Rambler Mine. Since Encampment did not exist until 1898, ore was probably hauled north to Ft. Steele. A strike in Purgatory Gulch in 1897 attracted miners to the area. The following year the Ferris-Haggerty Copper Mine at Rudefeha was established, and Encampment was built. Other mining communities in the area were Copperton, Rambler, and Battle (Junge 1972). The GLO map for Township 14 North-Range 85 West (surveyed in 1898) shows a road-labelled "Battle Lake and Grand Encampment Road". The road extended southwest out of Encampment, entering the forest midway along the north border of Sec.19-T14N-R84W. It followed the general route of the present road to Battle, then passed north of Battle Lake and stopped in Sec.26-T14N-R86W.

In 1902, a smelter was built in Encampment, as well as a 16 mile long aerial tramway to connect the smelter with the mine at Rudefeha. A road closely paralleling the tramway appears on a USGS map (surveyed in 1901 and included in a 1904 study) and was probably used in the construction of the tramway. By 1905, the isolated mining camps were served by a stage route. The Scribner Stage Company ran stages (six-horse Concord coaches) from Walcott Junction to Saratoga and Encampment, leaving Walcott daily at 7:00 AM. From Encampment, daily stages served Battle, 12 miles away; Rambler, 14 miles; Dillon, 19 miles; and Copperton, 20 miles. One could obtain saddle horses or livery teams to connect with the Homes-Laramie stage line at the Great Rambler mine 32 miles east of Encampment. Connections by team could also be made from Rawlins for Dillon and Rudefeha, 52 miles distant. Dillon and Rudefeha also benefited from a daily (except Sunday) mail and stage line from Saratoga (Beeler 1905:5)

Camps in the vicinity of Spring Creek and Jack Creek at the north end of the range were also accessible from Saratoga. Freight was generally brought in on the Walcott-Saratoga-Encampment Road and then distributed to the camps in the region. There were no railroads, so wagon roads were essential to the development of the region. As of 1905, over 500 miles of wagon roads had been built in the Encampment District to connect the various camps to nearby towns and to each other (Beeler 1905:5).

During the summer of 1902, the Carbon Timber Company established a major tie camp on the South Fork of the Encampment River near the Colorado state line (possibly just over the border) in Encampment Meadows. Forty-five men were put to work constructing a wagon road from the sawmill on Green Mountain to the new tie camp via Hog Park. The new road was to connect the tie camp, to be called Sweden (but always referred to as simply "the tie camp"), with Grand Encampment. It would serve not only the tie camp of some 300 men, but also the miners of the Hog Park area who had needed such a road for many months (The Grand Encampment Herald 7/25/02, 8/1/02).

By the end of August of 1902, a daily mail and stage route was established between the new tie camp and Grand Encampment, making a total of four regular stage routes in and out of that town. Construction was also underway on a half-way station on Green Mountain (to be called Olson but also referred to as Midway). A large force of men was enlisted to work on the town. According to Ranger Dick Cerise of the Encampment District, Olson was located in the SW1/4 Sec.6-T13N-R84W and a cabin still remains on the site. This tie camp road connected with the Laramie and Hahn's Peak Wagon Road, establishing a

link between Grand Encampment and Routt County, Colorado (The Grand Encampment Herald 8/29/02).

Frank White was the stage driver on the Grand Encampment-tie camp road in 1904. The stage ran year round, three times a week, to and from the tie camp. White would get to the half-way house in the afternoon, then start for the tie camp early the following morning, arriving about noon (The Grand Encampment Herald 12/30/04).

Although the Carbon Timber Company announced plans in December of 1911 to abandon the tie camp (The Grand Encampment Herald 12/8/11), the road remained on Forest Maps. Part of the route follows the general course of the present Forest Road #550.

By the mid-nineteen twenties, there were still few roads in the Hayden Division with no through roads. The Encampment-Slater Road (present Route 70) was only paritally built. The segment from Encampment to Haskins Creek had been designated as a Forest Highway. The Haskins Creek to Copperton segment was to be finished in 1925. Also in 1925, a survey was to be made for a Corral Ranger Station-Encampment-Slater Road. This road was needed to allow travel north up into the Savery Creek country and to Rawlins from the Forest. A road, designated as the Encampment-Canyon Road, was recommended to open up large areas of lodgepole timber near Hog Park. This road would eventually extend to Red Park in Colorado, where it would connect with a Routt Forest road (Wheeler Memo 1924; Medicine Bow Collection, Box 9).

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Early major transportation routes in the Laramie Peak area served to connect the Union Pacific Railroad with military installations (see Figure 12). The Rock Creek and Ft. Fetterman Stage Road connected Rock Creek Station on the Union Pacific with Ft. Fetterman (about 10 miles northwest of present day Douglas), then continued north and northwest to Ft. McKinney, Wyoming, and Ft. Custer, Montana.

A 36 mile stretch of gentle, hard, smooth road ran from the road to the summit of the pass in the Laramie Hills, passing through the Laramie Plains and Antelope Valley. The next 38 miles to La Prele Creek, at the northern base of the Laramie Hills, was hilly (two hills were "very steep and bad"). The road follows the LaPrele Valley to Ft. Fetterman. In 1877, this road was opened as a replacement for the road from Medicine Bow Station which ran northward to its junction with the Rock Creek Road, 14 miles south of Ft. Fetterman. The Rock Creek Road was gentler and on firmer soil, a few miles shorter (83.5 miles), and had fewer streams to cross between the railroad and the summit (U.S., Congress, House 1879:1708-9).

The Ft. Fetterman and Rock Creek Stage Road appears on the GLO maps, surveyed in the early 1880's. Two stage stations appear in the vicinity of the Forest, the Fortymile Ranch in the northern part of T27N-R74W, and the Point of Rocks Stage Station in the NE/SW Sec.34-T30N-R74W (see Table IV for excerpts from stage route north-south running itineraries). The route is generally followed today by a road through the Laramie Peak District in Range 74 West.

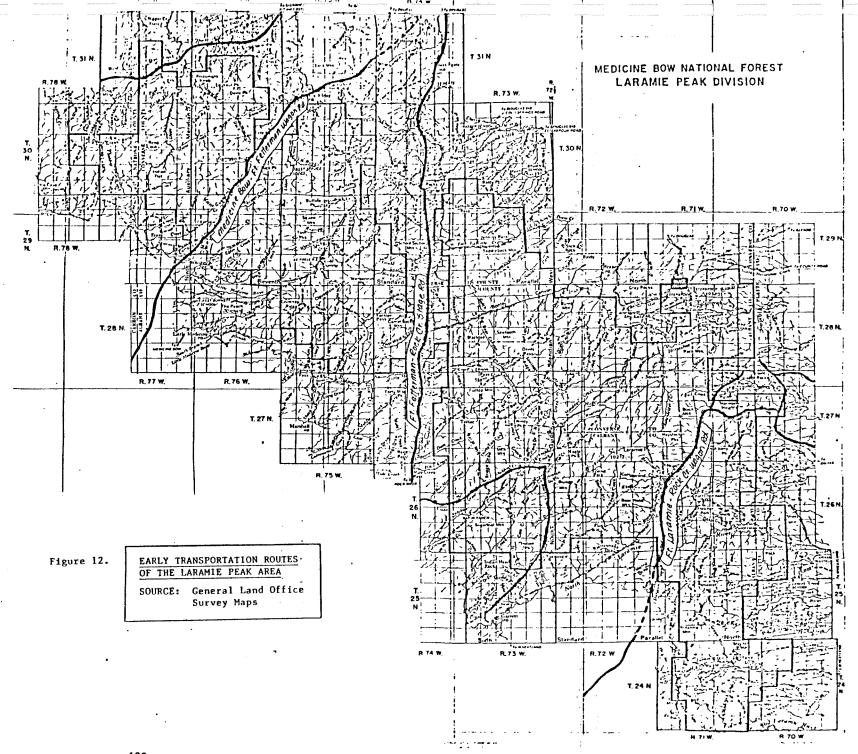


TABLE IV Fort Fetterman to Rock Creek Station (U.S., Congress, House 1879:1792).

FORT FETTERMAN TO ROCK CREEK STATION, UNION PACIFIC RAILROAD, WHITE ...

	Miles		Remarks
Fort Fetterman to Hunton's Ranch	3.32		
La Prele Creek	6.09	9.41	
Junction	4.55	- 13.96	With road to Medicine Bow
Small Creek	1.89	15.85	Crossing miry; water, wood, and grass.
Do	2.85	18.70	Crossing good; water, wood and grass.
Creek	6.08	24.78	Stream 9' x 6"; wood and grass.
yang Do nas ang salah ng sala	2.13	26.91	Water, wood, and grass For next 2 3/4 miles ascend very steep hill
Enter canyon	13.47	40.38	Near entrance, water, wood and repeatedly crosses, a small creek through the canyon.
Leave canyon	2.59	42.97	Ascent of very steep and bad hill.
Summit	4.35	47.32	Altitude 7,576 ft. Road follows Antelope Valley until emerging from hills.
Creek	1.27	48.59	Good water & grass; wood about 1 mile from road.
Do .	5.87	54.46	Creek continues on left of route several miles, sinks; water in large pools, & grass; no wood.
Enter Laramie Plains	2.84	57.30	
Rock Creek Station	26.20	83.40	Union Pacific Railroad

First for 57 miles the route crosses, and lies in, the Laramie Hills; thereafter on the Laramie Plains. Between La Prele Creek and the Summit the road is generally hilly, two hills being very steep and bad: thence to Rock Creek it descends quite uniformly in grade, and is generally smooth, firm and excellent.

The road between Medicine Bow and Ft. Fetterman was used until 1877, when it was replaced by the Ft. Fetterman and Rock Creek Stage Road. This route was 85.4 miles long, and included a very hilly stretch of 45 miles (crossing the Laramie Hills south of Ft. Fetterman). Fourteen miles of the route lay in canyons and were heavily snowed under from November to May. The last 40 miles, covering the Laramie Plains, involved four river crossings and areas of poor grass and no wood (see Table V for exerpts from stage route itineraries.)

TABLE V. Fort Fetterman to Medicine Bow (U.S., Congress, House 1879:1724)

FORT FETTERMAN TO MEDICINE BOW, WYTHING

	MI	les	Remarks
Fort Fetterman to Grossing of La Preis Crosk	2.84	ut see	eriya ere
Beston's ratch	0.53	3.37	a Marie
Leave La Prule Creek	6.07	9.44	Wood, water and grame; crossing of old Call- formis road
Jeaction	4.34	13.98	With road to Rock Creek
Enter Canyon	10.01	23,99	e a propietica de la companya de la
Boxelder Creek	3.09 939 9 5	1 1 1 1 1 1 1 1 1	Good water, grass & wood
Ranch	10.42	37.50)
Leave Casyon	0.70	38.20	jestypinka a roka ist.
Summit of divide	1.51		Altitude 7,992 feet
Lauve Larente Etila	5.36	45.27	Enter Largaie Plains
Little Medicine Bow River	2.93	48.20	Crossing bad; no wood, grass poor,
Do	10.09	58.29	Crossing
Do	8.95		Road nears stream which lies helf a mile or more on left of route
Lauve Little Medicine Bow River	3,10	70.54	[15 A S S S S S S S S S S S S S S S S S S
Medicine Bow River	6.19	76.73	Crossing, no wood.
De	7.72	84.45	Crossing.
Medicine New Station	0.95	85.40	54, 4d

In the first 45 miss from Fort Fetterman, the road crassing the Larante Mills is wary hilly, and the 16 miss lying in the canyon are obstructed by snew and impractable from Movember until Ray. Faurging from these hills, the route Hes, for the remaining 40 miles, on the Larante Fision.

TABLE VI. Fort Laramie to Rock Creek Station (U.S., Congress, House 1879:1729)

PORT LARANTE TO ROCK CREEK STATION, UNION PACIFIC RAILROAD, WYONING

Kami.	THE WE	les .	Lemarka
Fort Large to			
Chug Moter Creek	18,11	year.	Stream 10' x 2'; creesing good
Larania Bridge	3.02	21.13	Junction with cut-off route from Chayanna to Ft. Fetterman
P ₁ 1	∜a",	a Busali. Di	Cross Laranie River after se- conding its right bank from the fort. Good bridge.
Big Cottonwood Creek	14.09	35.22	Crossing good; leave cut-off pouts; water, grass, and waod.
Branch of Cottonwood Creek	2.18	37.40	Dry; wooded; poer grees.
Up Dry Branch	4.18	41.58	
Enter Laranie Hills	10.77	52.35	
Government gaveili	3.20	55.55	Old mill-site on Big Cotton- wood Creek; weter, grass, and wood,
Up Sig Cottomwood Greek	4.46		Bees of Larguis Peak; water grass, and wood. Gross and leave Big Cottmowood Greek.
	ស្គាល 🖂		and the second
North Laranie Liver	5.30	65.31	Streem 20' x 2'; creening good water, grass, and wood shak- dant.
Creek	1.13	66.44	Stream 5' x 4"; crossing good.
Prager Creek	1.76	68.20	Ascend creek 3-3/4 miles; mater, grass, and wood.
Proger's ranch	2.52	70.72	
Laave Prager's Greek	1.25	71.97	
Summit	0.30	72.27	Altitude 7,300 ft. Enter Laramie Plains.
Jenction	0.97	73.24	Trail across to Ft. Petternen and Rock Creek road.
Callin's Cut-off	4,44	77.68	Strike cut-off.
De	3.56	81.60	Laure cut-off.
Duck Creek	0.36	81.24	Stream 2' s 4"; grass; ne wood
Latenia River	4.35	85.95	Locals Fanch.
Leave Laranie River	8.46		Junction with road to Pt. Sanders.
Fond	2.72	97.13	
Junction	5,85	102,98	Rood to Ft. Potterman
Rock Creek Station	[.95	104.96	

Road to saveill emertimes hilly, but otherwise smod; thence to the samett a faint trail; practicable for warons, following an excellent natural route through Larante Hills; from assest to Rock Cress unois.

This route appears on GLO maps surveyed in the early 1880's as the "Medicine Bow-Fort Fetterman Wagon Road." It crosses the Medicine Bow Forest from southwest to northeast, passing through T29N-R76W and T30N-R76W, generally following Box Elder Creek.

Another early major route in the Laramie Peak area was the road from Ft. Laramie to Rock Creek Station, passing through the southeast portion of the district. Section of the route east and west of the Laramie Hils were reportedly well travelled and good, and were connected by "an extremely favorable but untraveled pass through the hills" (U.S., Congress, House 1879:

1729). This route established an easy line of communication between Ft. Laramie and the Laramie Plains.

The road entered the Forest in the vicinity of Cottonwood Creek near the east boundary, then swung south, passing a few miles to the east of Laramie Peak. It crossed the North Laramie River and continued south and west, joining the Rock Creek-Ft. Fetterman Road about two miles from the Rock Creek Station (see Table VI for excerpts from stage routes itineraries). Most of this route appears on GLO maps surveyed in the early 1880's, and is roughly followed today by US Forest Route #633 as far north as Black Mountain, where it heads east at Cottonwood Creek.

RAILROADS TELLO STEEDS TO THE SECOND

Medicine Bow National Forest's only railroad was the Laramie, Hahns Peak and Pacific Railway, known over the years by six different official names. Due to its almost constant problems, the line was also known as the "Late, Hard Pressed and Panicky" and the "Lord Help Push and Pull" Railroad. The only other railroad lines near the Forest, other than the Union Pacific main line, were a 13 mile line running southwest from Laramie to Soda Lakes, and the Saratoga and Encampment Railroad. In 1880, the Laramie, North Park and Pacific Railroad and the Pacific Railroad and Telegraph Company was incorporated by a group of Albany County men. They proposed to construct a railroad from Laramie southwest to Soda Lakes, thence to the Medicine Bows to follow the Big Laramie to a tributary affording access across the range. It would then connect with the Grand River Valley Railroad in Carbon County. In actuality, it reached only as far as Soda Lakes, where it served the mining community there for several years (Homsher 1949:55-56).

The standard gauge railroad, originally known as the Laramie Plains Line, got off to a bad start financially, but managed to survive most of its contemporaries. The original promoter and builder was Isaac Van Horn of Boston, who organized the Laramie, Hahns Peak and Pacific Railway Company early in 1901, when a frenzy of empire building hit Laramie and Albany County. The goal was to reach the mining area of Gold Hill in the Snowy Range, where the Wyoming Development and Transportation Company owned 16 properties. It would then descend the range, cross the upper Platte Valley, and proceed to Grand Encampment, Battle Lake, and Steamboat Springs (Hollenback 1960).

Before any rails were laid, promoter Van Horn began to develop Centennial, establishing a fish hatchery, golf course, and clubhouse. The stockholders realized the railroad was engaged in every activity but railroading, and it was not until 1907 that the train reached Centennial. By then, the Gold Hill and Centennial area mines had fizzled, and since the Saratoga and Encampment Railroad could have reached the mines from the west anyway, the LHP&P turned south toward North Park. The railroad purchased seven square miles of a rich coal deposit near Walden called Coalmont (Rock River Review: "Laramie Had A Railroad of its Own" by Kenneth Jessen, n.d.). The railroad would transport timber from the Medicine Bows and coal from North Park. The nearest railroads at the time of construction were the Union Pacific at Laramie and the Moffat Road to the south at Grandby in Middle Park, so the

line would provide a needed route into North Park.

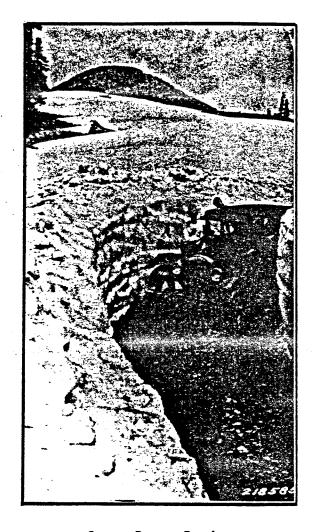
The first train reached Centennial on June 17, 1907. One train a day ran between Laramie and Centennial, described as a "mixed train with a combination car for passengers". Between 1907 and 1914, the line was also known as the Larimer and Routt County Railway Company (Hollenback 1960).

After 1907, about 10 miles of track were laid per year. Sixteen horses and a grading machine were needed to build the horseshoe curve above Albany, at a cost of \$21,000 (Hollenback 1960). By 1910, the railroad had acquired three locomotives, two passenger cars, sixteen freight cars, and one rotary snow plow. Track laying operations increased as winter approached, and the first train from Laramie reached Walden on Oct. 25, 1911. Coalmont, the western terminus, was reached in December, completing the 111 mile line. Winter operating costs were so high that the mortgage could not be paid, and in 1914, the line was forced to sell. The Colorado, Wyoming and Eastern Railroad took control, but severe winters continued to plague the line. During the winter of 1917, it took 21 days to complete a single Laramie-Coalmont round trip.

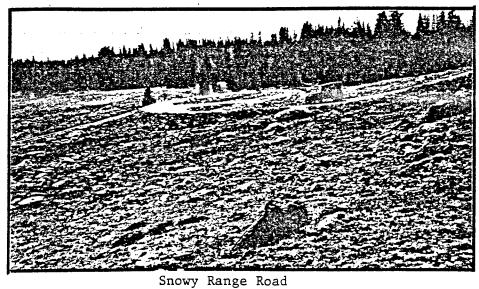
The railroad changed names twice in 1924. In April, new owners called the line the Northern Colorado and Eastern Railroad Company. At the urging of city residents, Laramie was again added to the name, and in June it became the Laramie, North Park and Western Railroad Company.

During the 1930's, the Interstate Commerce Commission requested that the Union Pacific take over the struggling line, but they were reluctant to do so. However, in 1935 a merger was consummated and the Union Pacific bought the common stock for \$650,000. In 1941, the Union Pacific petitioned to abandon the line (many short lines were being abandoned around this time, often for the iron in the rails). The ICC denied the petition. During and after World War II, the line continued to freight timber, coal, livestock, and minerals.

In 1951, the line became the Coalmont Branch of the Union Pacific. As a result, the name of Laramie, North Park and Western was dissolved, the Laramie depot was closed and operations were handled from the Laramie Union Pacific. Tri-weekly service between Laramie and Coalmont was to continue. As of 1960, the train left Laramie at 8 AM Mondays, Wednesdays, and Fridays, with coal and stock empties and a few merchandise cars. It reached Coalmont at 5 PM and backtracked to Walden for the night. The Coalmont branch of the Union Pacific is still an active railroad (Hollenback 1960).



Snowy Range Road
The deep drifts were hand shovelled in the late spring to gain the distinction of being the "first over."
(Medicine Bow Collection - American Heritage Center)



The "S" curves above the University of Wyoming Summer Science Camp. (Agnes Wright Spring Collection)

CIVILIAN CONSERVATION COLUMN

The Civilian Conservation Corps played an important role in the nation's forests in the 1930's and early 1940's. The Medicine Bow National Forest benefited greatly from the program.

In March 1933, Congress responded to President Roosevelt's urgings by creating the Civilian Conservation Corps under the Unemployment Relief Act. The CCC proved to be one of the most popular New Deal agencies, providing employment for almost 3,000,000 young men during the program's existence. Roosevelt had hoped to place the CCC program on a permanent basis; however, the man-power demands of World War II made this unrealistic by 1942. The program was designed to meet the major objectives of economic relief (all but \$5 of the enrollee's \$30 monthly check was sent to his dependents on relief, thereby recirculating money back into the cities), restoring confidence and "building men", and also resulted in a large amount of beneficial and lasting work (USFS Memo 11/16/33; Medicine Bow Collection, Box 7, "Reclamation").

President Roosevelt appointed a Director of the Emergency Conservation Work, advised by a council consisting of representatives from the Departments of Labor, War, Agriculture, and Interior. Labor was responsible for the selection of the enrollees; War was responsible for the enrollment, outfitting, conditioning of the men, the administration of the camps, housing, subsistence, sanitation, medical care, and leisure time; Agriculture and Interior were responsible for selecting the work projects and employing the men to get them done (Memo 4/20/33; Medicine Bow Collection, Box 7, "Reclamation").

The camps operated at varying strengths from 1933 through 1942, under the direct supervision of the U.S. Army, who in addition to the above duties was responsible for the men's discipline and morale, often under difficult conditions (USFS Release 12/31/33; Medicine Bow Collection, Box 7, "Reclamation"). The men often came from large cities and poor families, and the sudden transfer to a wilderness environment and harsh climate must have been difficult. Instances of violence may not have been commonplace, but at least two suicides and a fatal knife attack were reported to have occurred within the Medicine Bow CCC camps.

Selection of enrollees involved several requirements. The age limit was intitially 18-25, but was apparently modified over the years. As of 1935, age limits were reportedly 18-35, by 1937, 17-28 and then 17-23, although World War I veterans were exempt from the upper age limit (Laramie Republican-Boomerang 6/28/37). The men were required to be physically fit, unmarried, unemployed United States citizens who had dependents to whom they were willing to allot most of their pay of \$30/month.

Selection began from names on relief lists. The program sought men of character: clean cut, purposeful, and ambitious. Enrollment was totally voluntary, and there was no discrimination as to race, creed, color, or politics. The men would be supervised by the U.S. Army, but would be under no military discipline or drills, or wear Army uniforms (Memo 4/20/33).

An enrollee entered the CCC for a term of six months, and could then reenter until he had served two years. Each camp consisted of about 200 men and was under the supervision of a Commanding Officer; headquarters for Wyoming camps were operated out of Ft. Francis E. Warren in Cheyenne. (A clipping dated 6/24/35 [Medicine Bow Collection, Scrapbook] stated the probability of the headquarters being tranferred to Casper; no sources were found to verify this.) The work schedule was from 8-4, five days per week under the technical supervision of the Forest Service; the remaining time was under government supervision.

A certain number of local woodsmen were also asked to take part in the program. These men were under no restrictions as to age or marital status, and were selected by the State agency in cooperation with the Forest Service, National Park Service, and State forestry agency (Memo 4/20/33).

Facilities varied somewhat from camp to camp, but most of the camps had barracks, a kitchen, a mess hall, latrines, showers or baths (often with hot and cold running water), a recreation room, and officers' quarters. Other facilities sometimes included a reading room, a blacksmith shop, tennis courts, and areas for baseball and football. Most camps generated their own electricity, and newsreels and motion pictures were often available. One of the camps even boasted a small orchestra (Laramie Daily Bulletin 10/31/81).

In addition to the CCC camps, Medicine Bow also had two transient relief camps, which were established by the Emergency Relief Act (ERA). These men, at Pole Mountain and Mountain Home, worked under the supervision of the US Forest Service, but were housed and paid by the Relief Administration. Also under the ERA, men on Laramie relief rolls were employed and paid by the Forest Service (Armstrong 1935:31-32).

The CCC program experienced many financial ups and downs during its operating years. In June of 1937, Roosevelt signed a bill extending the life of the CCC for three years (Laramie Republican-Boomerang 6/28/37). However, by that December the CCC budget was cut, reducing both the number of camps and enrollees. An estimated 404 camps were to be closed, and the force was cut to 225,000 (Laramie Republican-Boomerang 12/28/37). The following spring, the program received an extra \$50,000,000, saving 301 camps from closing (Laramie Republican-Boomerang 4/20/38). By June of 1938, the CCC was increasing; the maximum strength of the program was projected to be 300,000 (Laramie Republican-Boomerang 6/23/38).

Wyoming CCC camps were part of the Eighth Corps Area, which also included Texas, Arizona, New Mexico, Colorado, and Oklahoma. The first camp in Wyoming was established at Pole Mountain on May 15, 1933. Six others followed: Chimney Park (F-17), Centennial, Arlington, Encampment (F-21), Ryan Park (F-22), and French Creek (USFS Memo 11/16/33).

The Arlington CCC camp was established on June 3, 1933, by men from Ft. Sill, Oklahoma. These men were joined a few days later by local, experienced men. A temporary camp was set up just west of Arlington because of high water and bad roads. When conditions improved, a permanent camp was to be established 4.5 miles up Rock Creek (USFS Memo 6/7/33; Medicine Bow Collection, Box 7, "Reclamation"). However. Forester Miller mentioned the locale of the permanent camp as being up Overland Creek (USFS Memo 6/10/33; Medicine Bow Collection, Box 7, "Reclamation").

As of the end of the 1933 season, there were 835 men enrolled in seven Wyoming CCC camps. Most of the camps were seasonal, with men working in warmer climates during the winter months and returning the following May. For example, the Centennial CCC camp closed on October 5, 1933, and others were evacuated up through November 5, when the Pole Mountain and Chimney Park men were transeferred to New Mexico and Arizona (USFS Release, 12/31/33). Other camps that came and went in the region of the Medicine Bow National Forest throughout the years of the program included Bush Creek camp (F-39), Mullen Creek camp (F-36), Esterbrook camp (F-37), and Saratoga Hot Springs (State Park) camp (F-38). Other camps mentioned included one at Albany and one at Round Top (near Cheyenne). Men were continually being transferred back and forth among the camps, and often "side camps" were established for specific projects.

The year 1935 was one of expansion for the CCC in Wyoming. In January, the papers announced the approval for establishment of eighteen camps in the state. In May, the Emergency Conservation Work Program was expanded to allow an increase in personnel from 3,800 to 6,400 men in Wyoming. Of the additional 2,600 men, about 1,000 were to be Wyomingites. An additional sixteen local men were to be selected for every company sent into the state from other parts of the country. Wyoming camps were to increase from nineteen to thirty—two, ten of which would be on National Forest land. Also in 1935, twelve Albany County men were examined and accepted to fill vacancies at the Chimney Park CCC. This was the result of a new allotment of funds for Wyoming; the state received allotments for 185 new "juniors" and 110 "drouth juniors" (clipping, undated; Medicine Bow Collection 1921-1935 Scrapbook).

Types of work varied from camp to camp, but the tasks generally included the following: maintenance and construction of trails, roads, bridges, fences, telephone lines, ranger stations, campgrounds and picnic grounds, fire lookout stations, and winter sports areas, as well as rodent and insect control, thinning of timber, erosion control, and fire fighting (Laramie Daily Bulletin 10/21/38). Roadside cleanup was done by all camps to improve attractiveness and reduce fire hazard (USFS Memo 11/16/33).

The following items (USFS Memo 11/16/33 and USFS Release 12/31/33) are some of the several projects undertaken by the various camps in 1933. Road construction in the Pole Mountain District extended from the Pole Mountain Nursery to Blair Meadows Campground, which connected with the road to the maneuver grounds and the Happy Jack Road. The Arlington CCC reconstructed the road from Arlington to Sand Lake; the Centennial CCC constructed a service road to the Brooklyn Lake summer homes; the Encampment CCC improved the road from Battle to Bridger Peak and constructed a two-span, 80 ft long log bridge across the Encampment River on the trail to Hog Park; and the French

Creek CCC worked on the road from Keystone to North Platte River. Telephone lines were built, including one from the Brush Creek Ranger Station to the Medicine Bow Peak lookout station. Lines were completed into camps, connecting with the nearest Forest Service or commercial line.

Research plots were established at the Chimney Park camp, where trees would be measured every five years to compare growth with unthinned stands. Approximately 1,340 acres of lodgepole were thinned throughout the Forest, leaving 500-1,000 trees per acre. The Chimney Park camp alone thinned 488 acres. Working in cooperation with the Fish and Game Department, CCC camps built retaining or rearing ponds for fish cultures at Towner Lake, at the millpond below Towner Lake, on Muddy Creek, on Upper Brush Creek, and at Pole Mountain. Many small dams and ponds were constructed throughout the Forest. Numerous brush, rock and log dams were built, mostly on French and Sourdough Creeks, where erosion control was necessary as a result of the French Creek burn of 1930. Over 300 small check dams were built on side drainages, and 25 larger dams were constructed across main drainages.

Campground improvements were also made in 1933. Many existing campgrounds were improved, enlarged, and fireproofed. Vedauwoo Glen Campground on Pole Mountain was enlarged to twenty times its original size. Other improvements included sanitation and conveniences: latrines, tables, grates, water, and shelter. The Pole Mountain CCC alone accounted for 700 acres of campground improvements. New campgrounds were constructed at Battle Mining Camp, French Creek, North French Creek, Big Sandstone, Five Cabins, Overland Creek, and the CCC site on the Snowy Range Road.

CCC enrollees acted as temporary fire lookouts, and were also called upon to fight fires. In 1933, about 210 acres of forest burned in eastern Wyoming. The Pole Mountain CCC spent 311 man days fire fighting and the Encampment CCC, 261 man days.

CCC camps were also responsible for miles of fence construction, mostly benefitting the cattle permittees. Creosoting plants for treating fence posts and telephone stubs and poles were installed at the Chimney Park and Ryan Park camps. Boundaries were surveyed and posted; 88 miles of boundary and 6400 acres of timber survey were completed. The Pole Mountain CCC expended 962 man days on the Pole Mountain Nursery. Crews were active in rodent and insect control, poisoning pocket gophers and ground squirrels and controlling bark beetle infestations.

An undated article from the Forestry News Digest quoted F.C. Bowman, Super-intendent, who described his French Creek camp (F-19) at Encampment as having "superior arrangement, construction, cooperation and organization". Their road building equipment included a caterpillar trail builder, a 310 cubic foot portable air compressor which operated two Jack Hammer type drills on two shifts, blasting powder, and corrugated culverts.

Not all projects undertaken by the CCC were constructive. During the 1930's, they destroyed the historic townsite of Battle as being a fire hazard (Junge 1972).

The CCC crews were also busy in the Encampment District in the Sierra Madre in 1933. Improvements were made at Willow Park and at the Big Creek Guard Station (Coughlin's Historical Notes 12/31/50; Medicine Bow Collection, Box 6, "Land Classfication").

more work on retaining ponds and stream control than in all the years of the state's history. Additional projects were to include placing soil in pools and rock bottomed streams to provide plant and insect food for fish (clipping 3/23/35; Medicine Bow Collection, 1921-1935 Scrapbook).

Each summer, at least some of the camps were called upon to combat the inevitable forest fires. In 1934, the Ryan Park CCC was active in fighting the fire on Elk Mountain.

In 1935, the Mullen Creek CCC was established, partly to work in cooperation with the University of Wyoming summer camp. The camp site needed improvement of terrain, regulation of streams, trail building, and site clearing.

A report by Superintendent Carl H. Ripatte of the Chimney Park CCC for 1935 indicates the kind of work one camp could accomplish in a season (clipping n.d.; Medicine Bow Collection, 1921-1935 Scrapbook):

- --In June, 1,500 acres on Sheep Mountain and 1,000 acres on Jelm Mountain were covered for insect control. Trees infested with beetle larvae were burned before the insects matured. The project was discontinued by June 15.
- --Campground maintenance was done on 9 campgrounds near Foxpark, and included installation of fire grates, incinerators, signs, entrance roads, garbage pits, latrines, tables, etc.
- --32 miles of truck trails were maintained near Foxpark, including installation of culverts, back-sloping, bridge building, gravel surfacing, painting bridges, signposts, and fences. 10 concrete and steel cattle guards were built along the truck trail from Woods Landing to Albany.
- --63 dams were built or improved along West Beaver and Fox Creeks, and 12,000 fish were planted in the streams.
- --Other projects completed included 15 miles of telephone line reconstruction, 10 miles of range fence maintenance, construction of a concrete cellar, creosote treatment of 3,000 fence posts, 800 phone stubs and numerous bridge pieces, and thinning of 150 acres of young lodgepole pine. Five hundred man days were spent fighting forest fires; two hundred man days were spent on fire lookout duty.

Superintendent Ripatte: "The average CCC enrollee does have an immense amount of ability, energy, and intelligence. There are carpenters, plumbers, mechanics, acetylene welders, clerks, and general handy men." (clipping n.d.; Medicine Bow Collection, 1921-1935 Scrapbook).

Around 1935, the University of Wyoming instigated a program of correspondence courses for some 400 CCC workers in Wyoming. Dr. J.R. MacNeel, correspondence

study director, prepared courses in English, math, social sciences, biology, typing, and shorthand, courses which were already in the University files. Prepared especially for the CCC were courses in auto mechanics, elementary forestry, journalism, and bookkeeping. Studying was to be done during the "leisure hours" and during bad weather, under the supervision of camp educational advisors and the technical staff. Funds for this program were provided by the Works Progress Administration (clipping n.d.; Medicine Bow Collection, 1921-1935 Scrapbook).

The CCC program continued to be highly productive throughout the late 1930's, fighting forest fires and insect manifestations, continuing the maintenance of roads and trails, and developing the recreational potential of the forests. In 1937, CCC men once again fought the pine bark beetles, this time on Elk Mountain (Wyoming State Tribune 9/9/37).

In January 1938, a side camp was established on Pole Mountain by 10-20 men from the Mullen Creek camp. Their duties included maintaining the Pole Mountain Nursery, the Happy Jack winter sports area, campgrounds, and fences (Laramie Republican-Boomerang 1/14/38).

Also in 1938, a crew of 25 from the Chimney Park CCC began work on a 7 mile long phone line from their camp to the top of Jelm Mountain, where a lookout station was planned for completion the following year. At that time (Nov. 1938), there were 176 men at Chimney Park, 34 of whom had been sent over to Pole Mountain to maintain the roads for the winter sports area (Laramie Republican-Boomerang 11/25/38). Also in November, work was begun by the Saratoga CCC on the new winter sports course on Barrett Ridge in Ryan Park, near Medicine Bow Lodge (Wyoming State Tribune 11/17/38). The fall of 1938 saw 585 men enrolled in the Mullen Creek, Chimney Park, and Saratoga CCC camps (Laramie Daily Bulletin 10/21/38). Shuffling of personnel was common in the fall: Saratoga CCC camp (F-38) moved from Esterbrook in the Laramie Peak Division to its winter quarters at Saratoga (Laramie Republican-Boomerang 9/18/38); the Saratoga side camp of 90 men at LaPrele Ranger Station, also in the Laramie Peak area, returned to Saratoga; 90 men from the Mullen Creek CCC camp were transferred east to Ft. Devon, Massachusetts leaving 40 men, the quota to be filled the following January (Laramie Daily Bulletin 12/9/38).

CCC enrollees, with local help, planted some 280,000 ponderosa and lodgepole pines on 400 acres of denuded land on Pole Mountain. Seedlings were supplied by the Pole Mountain Nursery (Laramie Republican-Boomerang 4/18/38).

Work continued into the 1940's. In November of 1940, Saratoga CCC camp (F-38) was still working on the Barrett Ridge winter sports area, the South Brush Creek picnic ground, and range fence construction. The Mullen Creek CCC was working on range fences and thinning lodgepole. The Pole Mountain CCC side camp was erecting fences on the north side of the Lincoln Highway to keep people out of the military maneuver area, which was strictly closed to the public (Laramie Daily Bulletin 11/29/40). Three camps did not move that year, but continued through the winter: Chimney Park, Mullen Creek, and Saratoga (Laramie Republican-Boomerang 10/31/40).

The year 1941 proved to be the last full active season for the CCC. During that year, work commenced on the Libby Creek Ski Area by a side camp at Centennial from Chimney Park (Laramie Republican-Boomerang 12/20/41). Esterbrook Camp (F-37), 127 men worked on the Eagle Peak truck trail. Both the Brush Creek and Mullen Creek CCC camps were scheduled to close during 1941. Brush Creek personnel had spent two summers at kyan Park, five winters at Saratoga Hot Springs State Park, and four winters at Esterbrook. Their accomplishments had included 127 miles of phone line, the Esterbrook fire lookout, and the Libby Creek Ski Area (clipping 10/28/41; Medicine Bow Collection, Scrapbook). The Mullen Creek Camp had operated for three years, and had worked on the lengthy boundary fence for Sheep Mountain under Capt. Vernon, the Commanding Officer. Their facilities had included a blacksmith shop, library, tennis court, and garage (Laramie Daily Bulletin 1941; Medicine Bow Collection, Scrapbook). The Chimney Park camp, which had operated continuously since 1933, was the last camp to close. It was disbanded on July 20, 1942 (Laramie Daily Bulletin 7/16/42). The site of the Ryan Park CCC camp was later used during World War II as a prisoner of war compound (Wyoming State Tribune 7/14/60). and the second of the second

The Mullen Creek camp, closed during the early years of World War II, was briefly revived by Sgt. A.G. Ganes and his crew, who renovated it in 1943 for use as an Army-Air Force rest camp. It was enjoyed by several hundred men before shutting down in August 1945 (Wiegand 1976:72). It was eventually acquired by the University of Wyoming, who used it as a recreational camp and gradually replaced the original log buildings (Wiegand 1976:75). The Centennial Ranger Station is currently located in the general area of the Mullen Creek CCC camp.

RECREATION: RESORTS, LODGES AND SKI AREAS

RESORTS AND LODGES

The recreational potential of Medicine Bow National Forest was not recognized until around 1914. The advent of the automobile made the previously remote wilderness more accessible to the public, and the Forest Service began to respond to the needs of the people to experience the benefits of an unspoiled environment.

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The year 1914 ushered in an era of recreational development, although it was not until the early nineteen twenties that the Forest Service began to keep records of the estimated recreational use of the Forest. In 1915, a road was graded from Centennial to Brooklyn Lake and Libby Flats. It was undoubtedly very rough, but provided access to the interior of the Forest. In 1920 and 1921, federal funds covered the grading of a highway through the forest from Centennial to the Snowy Range Lodge. In 1925, it was completed to Saratoga, and in 1937-1938, it was paved (see details under Transportation.) During a period lasting roughly from the late 'teens to the late thirties, the Forest encouraged and experienced a boom in resort lodges, summer homes, and winter sports areas.

One of the most spectacular and well known of the resort lodges was the Snowy Range Lodge, also known as Libby Lodge. It is located in the NE/SE Sec.29-T16N-R78W, about three miles from Centennial, and one mile on the Barber Lake Road from the juntion of Libby Creek Campground and Route 130. In 1924, the Snowy Range Resort Company announced plans to build a resort at Silver City, the site of an old mining camp. Architect W.A. Hitchcock planned a large main wing (27 ft x 30 ft) with 13 rooms on the second floor and 4 on the third floor. The main floor was to be used for a dining area, dance hall, offices, and a kitchen. A two story wing (to be set at a 45° angle to the main wing) would be 32 ft x 64 ft and contain 24 bedrooms. Logs were already cut and hewn. Contractor Ed Hicks had built a foundation of rough boulders. Walks, driveways, and five fishponds had been laid out. The complex was to include the main hotel and 12 cabins. It was expected that \$10,000 would completely cover the cost of the construction. The grand opening was anticipated for June 1924, and that "it should mark the beginning of another Estes Park" (Laramie Republican-Boomerang 1/7/24). The opening was presumably delayed until 1925, at which time the Laramie papers announced that construction was almost completed. The resort would accomodate up to 76 people, 44 in cabins and 32 in the lodge (Laramie Republican-Boomerang 6/20/ 25).

Libby Lodge has been described as an excellent example of turn of the century resort lodge construction. Seven thousand hand-peeled and chinked native trees were used. The floors were of imported hardwood. The three story rock fireplace was reportedly built by Anthony "Pop" Schlotzer, a local sculptor. In 1926, the Forest Service granted the lodge a 99 year lease under a special use permit (Chadey 1979:1,25).

Libby Lodge was in use in 1938, when Mrs. Lillie Smith reopened the Lodge for the summer season, serving luncheons, dinners, and catering weekend parties (Laramie Republican-Boomerang 5/27/38). A pamphlet issued by the Union Pacific Railroad in the late 1940's or early 1950's advertised the Snowy Range Lodge as providing winter accomodations for skiers. Ten rooms with bath were available for \$3.50-\$5.00/day, and seven cabins with bath were available for \$2.50/day or without bath for \$1.50/day. Meals were \$2.00/day (Union Pacific Railroad Pamphlet, n.d.). Further details of the various owners of Libby Lodge are available in Michael Chadey's History in the Making: Forest Service Policy in Regards to the Restoration of the Snowy Range Lodge (n.d.).

According to the present owner, David P. Egolf of Laramie, the lodge remained in use up through 1974. From 1974 to 1977, the building was vacant, deteriorating badly, and was seriously vandalized. The foundation had settled about 18 inches, doors and windows were gone, and both electrical and sanitation systems were substandard (a more detailed description of the remains is available in the National Register of Historic Places Nomination Form by Mark Junge). Mr. Egolf purchased the structure in 1977, and in 1979 began restoration at his own expense. He is operating under a special use permit from the Forest Service, and plans to restore the building to its original appearance. The building is on the National Register of Historic Places (phone conversation with David Egolf, Personal Communication 1981).

Two versions relate an Indian attack near the site of Libby Lodge. A tie camp, operated by Gregory during 1868-1869, was located on the site of the lodge. Mounted Indians from the prairies attacked the tie hacks, who fled to the woods. All reportedly survived, but all the camp buildings were burned, and the camp was never rebuilt. The office and commissary reportedly stood on the site of the lodge kitchen. Remains of the tie camp cabins were reported to have been observed in 1946 (Junge 1976).

The other version involved the mining camp of Silver City, a temporary mining camp, also supposedly on the lodge site. No date was mentioned for the incident, but it was reported that Indians had attacked miners about one-half mile from the camp. All were killed except for young Claude May, who had been out gathering wood (Wiegand 1976:32). Neither version has been verified.

Medicine Bow Lodge was one of the other early and well known resorts (NE/NE/NE Sec. 19-T16N-R81W), located on the west side of the Snowy Range. It was built in 1917 on Barrett Creek in Ryan Park, just off Route 130, about two miles east of the west boundary of the main Medicine Bow Division. Medicine Bow Lodge was constructed by Sisson and Moore, and opened on July 15, 1917 as a private hunting lodge. By the early twenties, it was operating as a summer guest ranch, kicking off each new season with a big dance. Mr.

C.E. Plummer and family were early proprietors, and were mentioned in clippings from 1923 through at least 1937.

In September of 1923, the Carbon County Institute was held at the lodge for five days, with 105 teachers in attendance. An undated advertisement listed rates as follows: \$3.50 per person per day; house tents including meals per week: \$21.00; cabins including meals per week: \$24.00. A pamphlet issued by the Union Pacific Railroad in 1937 advertised the ranch as having accomodations for 150 guests in 26 cabins, single or double, also bath houses with hot and cold water. The menu included fresh butter, eggs, milk, vegetables, and meat. Rates were the same as the above, with guides for pack trips at \$5.00 per day and saddle horses at \$2.50 per day (Union Pacific Railroad Pamphlet 1937). A later pamphlet was issued under the ownership of Ms. Anneye D. Wood.

Medicine Bow Lodge reportedly has not missed a season since opening in 1917, making it the earliest as well as the longest continually operating resort in the Forest. The original lodge and fireplace is still being used, along with new cabins and additions. It can accommodate about 36 people, and operates as a guest ranch in the summer and as a resort for cross country skiers and snowmobilers in the winter (Medicine Bow Lodge Management, Personal Communication 1981).

Echo Lodge, also known as the Roper Place, is one of the oldest lodges in the Forest. The Echo Lodge complex covers about 22 acres. It is located in the NE-1/4 Sec.10 and the SE-1/4 Sec.3-T13N-R79W, along Smith North Creek, a tributary of Douglas Creek. It is situated on National Forest land, and after many years of private ownership, it is now the property of the US Forest Service.

Billy Roper, born in the 1850's, came west from Elmira, New York because of a respiratory ailment. He worked on the Union Pacific Railroad, Colorado mines, and finally in the Keystone area mines (Beery n.d.:2). He built himself a sturdy cabin (15 ft x 25 ft) out of hand-hewn notched logs in 1884. The lodge itself was built by Roper and a team of horses, using 4 x 4's and 4 x 6's. He received help from the Muddy Creek Tie Camp for setting the rafters. He also built a cabin across the creek, and two more cabins and a barn. No specific dates are available for their construction, except that it was pre-1918. His original barn is now gone; another barn and two additional cabins were built in 1933, after Roper's death.

Roper made his lodge available to itinerant miners of the area, as well as to tie hacks working on tie drives. He rented three of his cabins to summer fishermen. He cleared about 20 acres for raising hay for his horses and tame deer. His establishment was also reportedly used as the site for a sawmill until 1910 (Kerr and Rudkin 1979:1). Roper was employed by the Wyoming Timber Company every spring to watch for log jams on the tie drives, and earned \$4.79/day. He was known to be well educated and have a large library of classics. He never married and lived a fairly solitary life.

Roper actually squatted on Forest property, and although he supposedly had a mining claim, he had no right or title to the land. When the Forest Service indicated the Roper place on their maps as a Ranger Station, he became so

angry he once ran Forest Supervisor Hilton off his land. The Forest Service reportedly did not approach him again (Kerr and Rudkin 1979:4).

In 1923, Tommy and Edith Thomson moved to the Keystone area and helped Roper run the lodge. In 1925, they began operating a summer camp for boys aged 8-12 with respiratory ailments (Beery n.d.:3). This summer camp for boys has also been referred to as the Lake Creek Resort (Kerr and Rudkin 1979:4), but appears on USGS maps in the SE 1/4 S. 2, T13N-R79W. Roper died in 1932 and left the complex to the Thomsons, who were issued a special use permit by the Forest Service. They built the existing barn and two more cabins, as well as some additions to the main lodge after Roper's death. There is some question as to whether the lodge remained in operation during World War II, but in 1947 the Thomsons sold their interest to Bernice and Raymond Doll of Chevenne. The Dolls named the resort Echo Lodge and continued to run it on a special use permit. In 1970, the Forest Service filed a trespass against Mrs. Doll. Both she and her husband died during the ensuing court battles, which lasted into the mid-seventies. Their sons took over the fight, but found it too costly and time consuming. The Forest Service forced them to vacate in September 1977 (Kerr and Rudkin 1979:8).

Buildings of historic importance still remaining on the site include: the Roper cabin (the "Boar's Nest"), 15 ft x 25 ft, hand-hewn, notched log structure in deteriorating condition; Echo Lodge, a two-story, 20 ft x 45 ft, hand tool construction using 4 x 4's and 4 x 6's, in satisfactory condition except for the later additions; the log barn (not original), built in 1933, in solid and usable condition; the two-room meadow cabin across the creek, still structurally sound; two cabins north of Roper's cabin, still sound; and Roper's grave, southwest Echo Lodge across the meadow, indicated by a small decayed, two-log fence. Other structures and debris are apparently in poor or hazardous condition, and could be removed without affecting the historical significance of the site. The Forest Service has had the lodge complex evaluated by an historian and has also issued an Environmental Assessment. recommending management alternatives ("Benign neglect is not considered acceptable"), (USFS Environmental Assessment: "Determination of Management for Echo Lodge", Historical File, Laramie District Office). Echo Lodge is currently on the proposed or pending list for the National Register of Historic Places, and is in a stage of the nomination process (Jo Ann Kantner, Personal Communication 1981).

Brooklyn Lodge was the creation of Harry "Hoot" Jones, an ex-rodeo cowboy who worked on the road crew building the Snowy Range Road in 1923. While he was working on the road, he selected a spot for a mountain lodge. In 1924, he built Brooklyn Lodge and the accompanying cabins (NE 1/4 S. 14, T16N-R79W). He opened each summer season with a dance that lasted until breakfast the following morning.

According to an illustrated pamphlet distributed by the Union Pacific Rail-road in 1937, accommodations at Brooklyn Lodge included 25 log cabins, as well as the main lodge. Recollections of two Forest Rangers tend to refute the large number of cabins; they felt that there were probably no more than a dozen, so perhaps the advertising was somewhat exaggerated (Stratten Van and Terry Hoffman, Personal Communication, 1981). The pamphlet further boasted of bath houses with hot and cold showers, a large central hall for dining

and dancing, a large living room with cheerful fireplace, a playhouse for children, a registered nurse in residence, and no snakes. Rates in 1937 were as follows: \$4.00 per day, \$25.00 per week for cabin and meals; children under ten, half rates. Housekeeping cabins were \$2.00 per day and up. Supplies were available at the lodge store. Mrs. Clara H. Craig was to be contacted for information (Union Pacific Railroad Pamphlet 1937).

Brooklyn Lodge is located at 10,130 ft elevation, about eight miles west of Centennial in the NE-1/4 Sec.14-T16N-R79W. It is located on National Forest land, and as of 1981 is operated on a special use permit by the Mountain Meadow Resort, owned by Mr. Hal Kissel of Cheyenne. The main lodge is situated on the south side of Route 130, and houses the staff; the guest cabins are located on the north side of the highway. Apparently there are no longer any of the original cabins on the south side. Having deteriorated badly by the early 1970's, the original cabins on the south side were torn down and replaced with new cabins on the north side. According to Ranger Hoffman, the main lodge is no longer in very good shape, and when the special use permit was transferred in 1975 to Mr. Kissel, a clause was included to request the removal of the building from its present location to the north side of the highway. At this time, Brooklyn Lake apparently has not been evaluated for a determination of eligibility for inclusion on the National Register of Historic Places.

In addition to the major resorts mentioned above, there were several other lesser known lodges, ranches, and hotels on or near the Forest.

At least five dude ranch-resorts were located in the general area of the North Platte River valley. The A-H Dude Ranch was located on the North Platte River, 22 miles southeast of Encampment. The ranch was run by Anderson and Hubbell, two former World War I pilots, on 2,200 acres of foothill land. As well as being a working cattle ranch, the A-H had guest accomodations and attractions that included a main building with living and dining rooms, 4 cabins, 50 saddle horses, trails, and fishing. The A Bar A Ranch on the North Platte was also a cattle ranch with guest accomodations. The Boyer YL Ranch was located in the foothills of the Sierra Madre, and appealed especially to families and young people. The One-Bar-Eleven Ranch was geared for small groups of boys aged 14-18, and was located between the Snowy Range and the Sierra Madre, two miles from Encampment. Sky Meadows was located adjacent to the Medicine Bow National Forest, thirteen miles from Encampment (Union Pacific Pamphlet n.d.).

The town of Centennial's historic attractions included the Rainbow Valley Lodge, the Mountain View Hotel, and the original Old Corral. The Rainbow Valley Lodge, formerly the Twin Rivers Lodge, was located north of town. It was developed into a resort by Mr. and Mrs. Ed Nelson, who were early settlers in the area (Wiegand 1976:54). The Mountian View Hotel (also referred to as the Mettler Hotel) was owned by Gustav and Anna Sundby. Trout was served at every meal; meals and accommodations cost \$1.00-\$1.50 (no date given for this information). After World War II, the Mountain View was bought by Dorothy Fisher and became the post office and a gift shop (Wiegand 1976:52,75).

The Old Corral was built by Pat and Nici Self, using the old Mountain View dance hall and bar site. The grand opening for the restaurant/dance hall was on March 17, 1946. In 1952, it burned to the ground within 30 minutes as the result of a gas explosion, and was rebuilt close to the original location (Wiegand 1976:72-75). A pamphlet issued by the Union Pacific Railroad advertised a Centennial Hotel as having accomodations for skiers (10 rooms with bath, \$3.50/day, meals \$2.00/day) (Union Pacific Railroad Pamphlet n.d.).

The Thompson Lodge (Sec. 2, T13N-R80W) appears on USFS maps from 1930, but no other information on this site was found.

The <u>Sand Lake Resort</u>, located at Sand Lake on the Arlington Road, was built around 1924. The establishment included several cabins, equipment, 29 acres of pasture, and the Snowy Range Fishing Lodge (<u>Rock River Review</u> 12/3/25). Charles Crismore ran the resort for many years, and accumulated a collection of numerous Indian artifacts from the Sand Lake area (Coughlin's Historial Notes 2/5/53; Medicine Bow Collection, Box 5). Sand Lake Lodge, as of 1981, is still operating as a summer resort (Terry Hoffman, Personal Communication 1981).

The <u>Summit Inn</u>, originally called the Grenville Dodge Inn was located at the summit of the Lincoln Highway, in the extreme NW/NW Sec.35-T15N-R72W. Built in 1926, it was dedicated to Grenville Dodge, the builder of the Union Pacific Railroad (<u>Wyoming Stockman Farmer</u> 9/26). It was described in 1928 as "a small resort, where it is intended later to build log cabins". It was operated under a Forest Service permit, and was expected to be serving meals, and renting cabins and saddle horses (USFS Policy Statement 1/10/28, Historical File, Laramie District Office). It appears on a 1929 Forest Service map as the "Summit Inn".

A 1937 Forest Service document described the Summit Inn as a well built, long, rambling building, well serving the resort needs of the area. However, "signs and flower beds lined with stones present a rather exotic and unsightly appearance", and the desire was expressed that the new permittee would be more refined. A large stone latrine built by the Forest Service served tourists across the road from the Inn. Construction of 3-4 cabins was planned (USFS Memo 4/16/37, Historical File, Laramie District Office). A 1940 photo showed an attractive, rambling one-story, log building. It provided food and drink for skiers at the Summit Ski Area, at least through the late 1940's (Union Pacific Railroad Pamphlet n.d.). The Summit Inn has since burned down, and no traces remain (Terry Hoffman, Personal Communication 1981).

Recreational facilities in the Medicine Bows were also planned for the Medicine Bows by the Laramie Boy Scouts. In July 1922, the Scouts planned to establish a permanent camp near Bear Lake. An entire area adjacent to the lake was set aside for their use. The Rotary and other civic organizations backed the plan. The Washington Bulletin stated: "it is certain that a substantial camp will be erected" (Washington Bulletin 1922). The plans must have taken a long time to realize, for in September 1934, the Laramie Boy Scouts were still planning to build a lodge in that area, on the rim of Silver Run Lake (called Bear Lake on the Forest map) five miles west and two

miles north of Centennial. No verification was found for the realization of either of these plans; however, Ranger Terry Hoffman testifies to having observed a large, standing chimney and possible lodge remains near Silver Run Lake in the NW-1/4 Sec.26-T16N-R79W (Terry Hoffman, Personal Communication 1981). Another plan, developed by Forest officials and Scout executives, involved a lodge in Chimney Park above Woods Landing. This plan included a lodge hall, showers, camping units for four troops, and rifle and archery ranges. The facility was scheduled to open July 8, 1951 (Laramie Republican-Boomerang 6/21/51). This camp, in the NW-1/4 Sec.25T13N-R78W, is still functioning.

UNIVERSITY OF WYOMING SUMMER SCIENCE CAMP

The 12-15 miles between Centennial and Medicine Bow Peak crossed four life zones: the Arctic-Alpine, Hudsonian, Canadian, and Transition. The science departments at the University of Wyoming in Laramie realized the instructional potential of such an environment. Before 1925, Dr. J.W. Scott, head of the zoology department, promoted the use of Sheep Mountain as a base for a natural area and as a location for a summer science camp. However, the site chosen was to the south of Route 130 on the edge of the Snowy Range Natural Area between the Green Rock Picnic Ground and the Brooklyn Lake Road. According to one source, the camp began in 1922, and was administered by the University of Wyoming in colloboration with Columbia University (WPA Writers' Guide 1941).

The "Coolest Summer School in America" was organized to offer courses in geology, zoology, botany, forestry, and engineering. Officers of the Forest Service were requested to give weekend lectures on the Medicine Bow National Forest and forestry practices. The Director of the Summer Science Camp for many years was Dr. S.H. Knight, head of the University of Wyoming geology department. In 1926, he announced the offering of the following courses for the summer: art, botany, civil engineering, geology, and zoology (Laramie Republican-Boomerang 3/27/26).

In 1927, the Forest granted the University a special use permit (revised in 1935) to cover the use of 26.5 acres (Sec.13 and 14-T16N-R79W) for construction and maintenance of one main lodge building, two lab buildings, and thirty-five service and miscellaneous buildings. In 1935, an area of 771 acres of virgin timber near the camp was set aside as a natural area for conducting studies of soil structure and chemical composition, geology, botany, forest ecology, etc. The project attracted many prominent researchers and insured the protection and preservation of virgin spruce timber. Also in 1935, the Mullen Creek CCC camp was established near Centennial, partly to work in cooperation with the University Summer Camp, improve the terrain, build trails, regulate streams, and clear sites (clipping n.d.). As of 1951, the Summer Camp was still under the supervision of Dr. S.H. Knight, and was reportedly used by students and faculty from all over the country. The institution remained active until the mid-1970's, when the considerable operating expenses and deterioration of buildings could no longer justify its existence. The high altitude and almost year round snow had long made

the camp's functioning difficult. In 1981, the University sold the camp to the University of the Wilderness, a private concern, for a nominal sum. The latter will provide courses in environmental education and ecological studies. The Camp was nominated for the National Register of Historic Places by the State of Wyoming in 1980, and is presumably in some stage of the nomination process at this time (Terry Hoffman, Personal Communication 1981).

SUMMER HOMES

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In 1915, a rough road was graded from Centennial to Brooklyn Lake and Libby Flats. This new access to the Forest prompted a flood of inquiries for summer home sites. To avoid indescriminate development, the Forest surveyed and plotted a group of cottage sites around Brooklyn Lake (Duthie 1916:8).

During the nineteen twenties, the Forest Service began to encourage people to build summer homes in the Forest. The first one was built in 1915; by 1935 there were 96 residences in the Forest (Armstrong 1935:23). A 1924 clipping from the Laramie Republican-Boomerang announced that the Forest Service would lease their land for the construction of rustic log vacation homes and would provide building plans. In 1921, another clipping stated that the lease would cost \$15.00 per year, and the construction costs of a summer home would total approximately \$500-600. Groups of people formed various "summer home groups", such as the Libby Lodge Summer Home Group, the Lower Libby Summer Home Group, "Cascade", and others. Most of these summer homes are still functioning under special use permits from the Forest Service. These permits are issued for twenty years, with a clause stating that an overriding need by the Forest Service (such as campground development) can terminate the permit, with ten years notice to the permittee. The present summer home leases are due to expire in 1989, but a recent environmental assessment indicated that all leases would probably be renewed (Terry Hoffman, Personal Communication 1981).

WINTER SPORTS AREAS

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The late nineteen thirties and early forties saw a surge in the development of winter sports areas. At least five areas were thriving during this period, three on the main Medicine Bow and two on Pole Mountain.

The plans for the Barrett Ridge (or Ryan Park) winter sports area were announced by the Forest Service in November 1938. It was to be developed near the Medicine Bow Lodge (SE 1/4 Sec. 20, T16N-R81W), and labor was to be furnished by the Saratoga CCC camp (Wyoming State Tribune 11/17/38). Barrett Ridge opened the winter of 1941-1942 with a chair lift 2600 ft long with 40 chairs (Laramie Bulletin 12/11/41). A pamphlet issued by the Union Pacific Railroad shortly after 1947 included a section on the Barrett Ridge area, with the following information: the Ryan Park Winter Sports Club operated the shelter cabin where refreshments were provided; the ski run was located

at 8,800 ft on the north slope of Barrett Ridge and offered good skiing from mid-December through mid-April. Facilities included a 700 ft rope tow with 160 ft rise for beginners and intermediate skiers and a 2,600 ft chair lift with 800 ft rise serving a 2,600 ft "A" (expert) run and a 3,700 ft intermediate run. Cross country skiing trails were also available (Union Pacific Railroad Pamphlet, n.d.). Barrett Ridge reportedly ended operations in the 1960's (phone conversation with Medicine Bow Lodge management, 10/23/81). The Forest Service has issued a special use permit for development of a new ski area southeast of the old one, but at this time no action has been taken on the part of the permittee (Terry Hoffman, Personal Communication 1981).

The Libby Creek Area was located about 1-1/2 miles above Libby Lodge, off what is now the Barber Lake Road (originally the route of Highway 130), not far from the Inspiration Point Ski Area (Laramie Republican-Boomerang 2/26/ 40). The area was worked on by the Brush Creek CCC camp enrollees (clipping 10/28/ 41; Medicine Bow Collection, Scrapbook). The slopes were located at a 9,200 ft elevation, and the main run was over 3/4 mile long with a 25-60% slope. A modern chair lift 3,000 ft long and two rope tows serviced the area. A practice slope was located close to a log shelter cabin built by the Forest Service. The Snowy Range Winter Sports Club operated the ski tows and offered instructions. Cross country ski runs were also available, one of which was eight miles long and led to a "sensational slalom run off the Snowy Range to Brooklyn Lake". There were also toboggan runs (Union Pacific Railroad Pamphlet, n.d.). Libby Creek was closed during the war, revived for a period of time after the war, then closed in 1953 (Wiegand 1976:75). Remains of the steep, narrow slopes of the Libby Creek Area can still be seen from the Barber Lake Road.

Inspiration Point was another ski area located near the Libby Creek Area, somewhere below Lake Marie (Laramie Republican-Boomerang 2/26/40). It apparently opened the winter of 1938-1939, when the Snowy Range Winter Sports Club tried out the new ski lift (Laramie Republican-Boomerang 12/25/38). A shelter cabin was constructed that winter, measuring 20 ft x 24 ft. Newspaper clippings indicated that the ski area was still used in 1940, but no date of abandonment or exact location was available. From available information gathered, it seems likely that Inspiration Point was also referred to as the Snowy Range Winter Sports Area (Laramie Republican-Boomerang 2/26/40; WPA writers project, 1941:256).

One of the winter sports areas on Pole Mountain was the Happy Jack area, located 11 miles from Laramie on the Happy Jack Road at the head of Pole Creek, Sec.24-T15N-R72W. Its proximity to the Happy Jack Picnic Ground allowed the doubling up of facilities. The approach to the area put the skiers at a point slightly higher than the top of the runs, saving a strenuous climb from the bottom. It appears that the run lacked any kind of a tow at that time (USFS Memo 4/16/37, "Pole Mountain Recreation Area" Historical File, Laramie District Office). The Mullen Creek CCC side camp worked on the area in 1938 (Laramie Republican-Boomerang 1/14/38). There is some evidence to suggest that the Pole Mountain CCC camp also worked on it (taped testimony of 1940 CCC enrollee R.J. Smith 1981). Use of slides and runs was regulated by a Forest Service caretaker. In addition to a 1500 ft slalom run and a practice slope, there was a 1400 ft ice-trough toboggan run (WPA

Writers' Guide 1941). The Happy Jack winter sports area may have also been referred to as the Pole Mountain Ski Area. It was closed in 1977 (Terry Hoffman, Personal Communication 1981).

The Summit Ski Area was also located on Pole Mountain, at the highest point on the Lincoln Highway. It was in use the winter of 1939-1940 (Laramie Republican-Boomerang 2/26/40). The elevation was 8,500 ft and the Summit Tavern (Summit Inn), located at the top of the area, provided food and drink. One 825 ft tow rope with a 200 ft rise as well as and cross country trails were available to skiers (Union Pacific Railroad Pamphlet, n.d.).

The currently active Medicine Bow Ski Area, located on the south side of Route 130 above Hanging Lake, was opened in 1960 by Gaylord Wetherill and Edward Stratemeier of Kansas City (Wiegand 1976:79). It is the only functioning ski area in the Medicine Bow National Forest at this time (Terry Hoffman, Personal Communication 1981).

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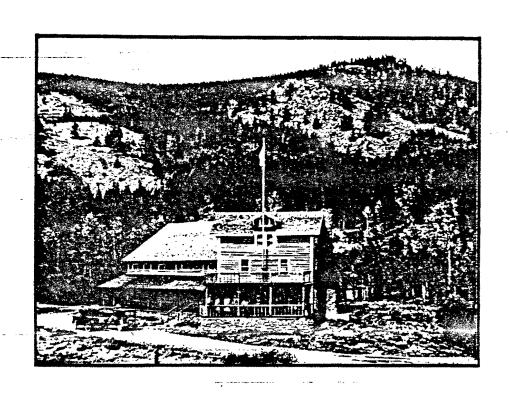
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Libby Lodge (Snowy Range Lodge), 1927 It was constructed in 1925 utilizing 7000 hand-peeled native trees and imported hardwood flooring. The Libby Lodge is an excellent example of early 20th Century resort lodge construction.

(Medicine Bow Collection - American Heritage Center)

WATERSHEDS & WATER PROJECTS ON THE FOREST

WATERSHEDS

The Medicine Bow National Forest lies within the watersheds of the North Platte and Green Rivers. All waters west of the Continental Divide (the western portion of the Sierra Madres) flow into the Green River, thence into northwestern Colorado and ultimately to the Pacific Ocean. The rest of the Forest east of the Divide drains into the North Platte River, thence to the Missouri River. The average annual water yield from these Forest lands is approximately 1,369,001 acre ft: from the North Platte Basin, 1,095,421 acre ft, or 0.9 acre ft of water yield per acre, comprising 60% of the flow of the North Platte at the Wyoming-Nebraska state line; from the Green River Basin, 173,580 acre ft from 182,225 acres of Forest, or about 1 acre ft of water yield per acre. There are approximately 800 miles of perennial streams and 80 lakes on the Medicine Bow National Forest, and water quality is assessed as excellent (USFS Management Situations 1980:4).

One of the most important functions of a Forest is to protect watersheds. The importance of water as a resource was recognized early in the settlement of this region because of the semi-arid nature of most of the land. John H. Mullison, one of the first rangers on the Forest, believed that water conservation would, in the long run, prove to be the most important result of maintaining a forest (Bruce 1959:29). Local residents realized that lack of water conservation would destroy the economic value of their property. Drainages from the Forest furnished irrigation water for nearby stock raising ranches. The combination of summer range within the Forest and the hay raised under irrigation made a stable local livestock industry possible. As of 1935, there were approximately 225,000 acres irrigated by waters from the Medicine Bow, Hayden, and Pole Mountain Divisions (Armstrong 1935:27).

Early Forest Supervisor P.S. Lovejoy (1908-1911) realized that timber had a very marked effect on runoff, conserving and regulating the water flow. The relatively easy grades of the Forests' slopes allowed for slow runoff with little erosion and made tie-driving possible. Said Lovejoy: "Nearly every creek is drivable" (Bruce 1959:28). Apparently the west slope of the Hayden presented the only serious erosion problem. Parts of that area were denuded from old slashings, fires, and overgrazing, much of which occurred before the formation of the Forest. Floods caused by spring runoffs were causing erosion; ranchers on the Little Snake were getting too much water in the spring and too little in the summer (Bruce 1959:38). Some corrective measures had been taken before 1910, including the protection of grasses, which are a secondary forest cover (Bruce 1959:104).

EARLY WATER PROJECTS

According to James Blackhall, long-term supervisor of the Hayden Division, irrigation on lands adjacent to the Forest began about 1880, consisting of small ditches to irrigate bottom lands. As of 1915, there were no formal irrigation projects on the Hayden, only small individual or company ditches outside the Forest. There were no reservoirs at that time, other than small individual projects. Almost all of the water from the Hayden, except for the North Platte, was appropriated for private irrigation concerns (Blackhall 1915:13).

Blackhall also related that the town of Encampment had built a ditch and reservoir in 1900 for its water supply. Although the water originated from within the National Forest, the ditch was taken out several miles below the Forest boundary. No land or water rights for water supply had been purchased (Blackhall 1915:15).

By 1935, some limited water development had occurred on the Hayden. Hornet Draw Reservoir (Sec.17-T13N-R87W) was constructed in 1934 below a wet weather spring; fill was 40 ft long and 6 ft high. Green Ridge Reservoir (Sec.10-T14N-R88W), near the head of Black Canyon, had been constructed a number of years previously and was washed out and in need of reconstruction in 1935. In 1934, about 20 springs were developed on Battle Mountain and on the west edge of the district. Springs were dug out and fenced, and some were furnished with log troughs for watering sheep (Ratliff 1935:82b). Cow Creek Reservoir was another early water project on the Hayden, appearing on USFS maps from 1930.

The following information comes from Coughlin's Historical Notes, 1/29/51; Medicine Bow Collection. Box 9, "Watersheds".

A number of projects involving reservoirs, flumes, and ditches were undertaken in and around the Medicine Bow National Forest beginning in the late 1800's. Irrigation activity increased in the late 1880's, as ranchers and small companies began acquiring water rights. Water and irrigation companies were established to handle various water schemes, providing storage and canals, and selling the water to users.

The decade between 1900 and 1910 saw an increase in irrigation activities. Around 1906-1907, land promoters Talmage and Buntin were involved in extensive land sales on the lower Little Laramie and north and east of town. Much of the land included that of benches above the river bottom. A water project was intiated involving Lake James, diverting water from upper Rock Creek through the Little Laramie and onto Blackburn flats through the Bellamy ditch. The project failed, leaving many Middle Western farmers who had bought Talmage and Buntin land with dry farms.

The Laramie Water Company was very active during these years in the Medicine Bows. Around 1908-1909, a project called the Bell Supply Ditch No. 2 was established from Douglas Creek below the mouth of Hay Creek, crossing the drainage of Beaver Spring and Muddy Creek. It terminated on the divide between Muddy Creek and the South Fork of the Little Laramie. This project was

surveyed by E.R. Pollock inn 1908, and approved for flood water in 1909 by Clarence Johnson, state engineer. This was a collaboration between R.D. Stewart, the engineer for the Laramie, North Park and Western Railroad, and "Colonel" Edwin J. Bell, who controlled a great deal of rangeland in the Little Laramie drainage. The object was to divert water from the upper Douglas to the Little Laramie, create a resevoir in the Centennial Valley, and take the water out of the Little Laramie by means of a canal.

Another project on Douglas Creek was undertaken by the Interstate Reservoir and Irrigation Company (again, E.J. Bell) in 1909. The company was granted water rights for 250 second feet to be diverted from Douglas Creek below Holmes and north of Bear and Elk Creeks to the South Fork of the Little Laramie. R.D. Stewart and E.J. Bell were also involved in a Libby Creek project, surveyed in 1909 by the District Engineer and Supervisor Lovejoy, whose reports indicated that approximately 985 horsepower could be developed on Libby Creek.

Another water diversion scheme involved a ditch from the Little Laramie near Porter Lake which could divert water to Lake Hattie (the Laramie Water Company's project) or up to the flats near the Overland Trail through Windmill Hollow. The Laramie Water Company constructed the ditch toward the Overland Trail. They also cleared the Bell Supply Canal right-of-way within the Forest. According to a 1916 report by the Keystone District Ranger, 500 yards of the canal were completed, and excavation on about one-half mile had begun, but no work was reported to have been done on the project "for several years". The project was evidently abandoned, and in 1923, the Laramie Water Company relinquished its right-of-way to the Federal Land Office in Cheyenne, and the easement was cancelled by the General Land Office that same year.

The water rights of the Laramie Water Company depended largely upon flood waters. The old Pioneer Ditch Company had some prior water rights, but transferred a sufficient amount to the Laramie Water Company to operate the Lake Hattie Reservoir. Lake Hattie was constructed between 1900-1910, and was supplied by a canal from Sodergreen Lake.

During the same era as the Talmage-Buntin land promotions, rancher Frank C. Bosler also tried his hand at land development. His scheme involved an irrigation project and power plant on his land along Rock Creek. He applied for a reservoir site of 148 acres in 1912 near Sand Lake (Sections 9,16,17, Township 17 North-Range 79 West). He constructed a dam and cut a large number of Englemann spruce below the proposed high water mark. After several years of ups and downs, the project was abandoned.

Bosler promoted another project with the Diamond Cattle Company, involving two ditches to carry water from the Medicine Bow River drainage to the Rock River drainage. One ditch was under Bosler's name as of 10/15/13. He cut a good deal of timber along the right-of-way, following the 10,450 ft contour northwest from Sec.32-T14N-R79W, to a point on Deep Creek near the corner of Sec.17, 18, 19 and 20-T17N-R79W. This project was closed out on 7/1/23. The Diamond Cattle Company was given an easement on 11/9/15, but it was ultimately rejected by the Department of the Interior in 1921. Bosler was involved in several timber sales, and he established a power plant near Arlington, and constructed the Diamond Reservoir. The Sand Lake project,

however, failed before the feeder ditch could be constructed.

Ranger Louis E. Coughlin of the Medicine Bow National Forest observed the serious erosion caused by the inefficient engineering of these early water projects. One of the early projects involving the diversion of water from the upper Big Laramie into the Cache La Poudre drainage resulted in severe erosion. He also recognized the negative effects from the Lake Hattie project, noting severe erosion on the divide between Sodergreen Flats and the Lake Hattie Basin. His feeling was that it was fortunate that the Wyoming Development Company, which operated the Wheatland Reservoir, had prior water rights, preventing companies from developing and promoting much land in the vicinity of the Medicine Bow National Forest.

There were also several early water diversion projects on the west side of the Medicine Bows. The purpose of most of these endeavors was to supply irrigation water to local ranchers, either on a commercial or non-commercial basis. The following information was gained by an inspection of Forest Service "special use" files, available in the Supervisor's office in Laramie. These records revealed 1907 as the earliest year for permit applications for water projects.

The Wiant Ditch was undertaken by Ira Wiant et al., and was constructed under a permit issued on 7/13/07. The project involved Sections 7 and 8, Township 16 North-Range 81 West, and served to irrigate the Hay Creek Ranch belonging to Wiant. The Wiant Ditch is still in the Forest Service open files.

Also in 1907, the French Creek Irrigation and Development Company applied for a permit for a ditch on the Lower French Creek and its tributaries. The permit apparently was not used, and another special use permit for a ditch and flume was issued in 1909 for Sec.5-T14N-R81W (outside the present Forest boundary), and again in 1910 for an irrigation ditch 1.9 miles in long in Sec.27, 28 and 29-T15N-R80W. These permits were cancelled in 1919.

Highline Canal #4 was another early water project in this area. Application for easement was made by J.H. Holmes in 1911 for a reservoir and ditch. The ditch was to run from North French Creek to Barrett Creek, and from South Brush Creek to North Brush Creek and the old Sterrett ditch; the general purpose being to divert water from North French Creek about fifteen miles northwest to irrigate the Cedar Creek and Saratoga Valleys. The undertaking was of a commercial nature and included plans for one or more storage reservoirs. In 1911-1912 the ditches were constructed; in 1913 the Saratoga Reservoir and Canal Company acquired all rights and titles from Holmes; by 1921 all construction was completed. In the 1960's the ditch was improved and widened, and has apparently been operating continuously since 1921. Other early water projects on the west side of the range included those of the Sanger Ranches, the Condict Ranches, and the Quealy Land and Livestock Company. Some of these early efforts have been modified and improved over the years and are still operating.

The major water project in this area today is Turpin Reservoir, constructed in 1955. Application was made by Raymond Ault et al., in 1954 for a ditch and reservoir. The dam itself is on state land (Sec.16-T17N-R8OW) and was designed for a capacity of 1316.9 acre ft. The land to be flooded (Sec.21.

22-T17N-R80W) and the ditches are on Forest land. The purpose of this project was to divert irrigation water from headwaters of the Medicine Bow River to Pass Creek. It is still operating under a special use permit.

THE CHEYENNE WATER DIVERSION PROJECT

The main water-related project in the Medicine Bow Forest at present is the Cheyenne or Snowy Range water diversion project, designed to provide a definite water supply for the city of Cheyenne unti the year 2020 (when its population is estimated to reach about 115,000, and will demand some 23,000,000 gallons per day). About 12,000,000 gallons of this amount will be provided by the diversion project; the balance will come from existing sources (Wyoming State Tribune 9/24/64).

Cheyenne's water supply had been provided by a surface water collection system in the Crow Creek watersheds on Pole Mountain as well as four ground-water well fields west of Cheyenne (Conner 1981:4). When Cheyenne outgrew that water supply, voters approved a bond issue for an \$11,000,000 water diversion project. The basic plan involved diverting water from Douglas Creek, a tributary of the North Platte, to Cheyenne, and repaying that water by diverting unappropriated water from the tributaries of the Little Snake River, west of the Continental Divide, into the Encampment and North Platte Rivers (Laramie Daily Boomerang 6/3/62).

The project covers 83 miles and crosses the Sierra Madre Range, the Snowy Range, and the Laramie Range (the present Hayden, Brush Creek, and Laramie Districts), (see Figure 13). Bidding began on the project in 1961. J.T. Banner and Associates of Laramie were the surveyors and engineers for the project. Construction began in 1962, and Hog Park and Rob Roy Reservoirs were completed by the end of 1965. Banner used a new type of steel tubing developed in the early 1950's capable of withstanding powerful internal pressure. The pipe system permitted a gravity flow across rugged terrain without a pump by having the point of the water's origin and each successive hilltop lower in elevation than the preceding point (Wyoming State Tribune 9/22/64). This use of gravity flow for over 50 miles from Douglas Creek to Middle Crow Creek saves Cheyenne nearly \$500,000 a year on pumping operations (Wyoming State Tribune 9/23/64).

The westernmost part of the project involves the Little Snake Diversion pipeline and Hog Park Reservoir. A 36 inch diameter, reinforced concrete pipeline collects water from the North Fork of the Little Snake and its tributaries west of the Continental Divide by means of several diversion dams, and from small streams and runoff. This water is transported under the Continental Divide to Hog Park Creek and Reservoir through a 3,480 ft long, 9 ft x 8 ft unlined, horseshoe-shaped tunnel. The east portal is 20 ft lower than the west portal, and carrying capacity is approximately 340 cubic feet per second (Conner 1981:4).

Hog Park Reservoir was completed in November 1965 (Timothy R. Conner, Personal Communication 1981). The dam is a 60 ft high, 500 ft long earthen dam

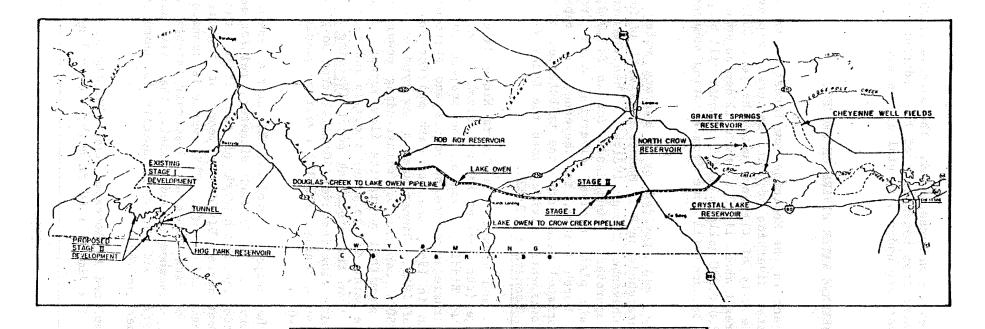


Figure 13. CHEYENNE-SNOWY RANGE WATER DIVERSION PROJECT
SOURCE: Banner and Assoc., Engineers

on Hog Park Creek, 2.8 miles upstream from its confluence with the Encampment River. Its storage capacity is about 2970 acre feet and was constructed to control channel erosion in Hog Park Creek. Water released from Hog Park Reservoir into the North Platte River drainage is adjusted to balance the water removed from that drainage by the Douglas Creek diversion (Conner 1981: 4-5). Approximately 12,000,000 gallons per day flow out of the dam (Wyoming State Tribune 9/23/64). Hog Park Reservoir has become a popular recreation site in the Sierra Madres, being large enough to accommodate canoes and other small boats (Conner 1981:5).

Rob Roy Reservoir was completed in December 1965 and constitutes one of the chief permanent features of the system. Construction cost was projected at \$1,500,000. Rob Roy is the main regulating reservoir, where water from Douglas Creek is tapped. The dam is a 95 ft high, 1094 ft long earthen dam with a capacity of about 9,000 acre ft, and impounds and regulates the flow of Douglas Creek. Water is released into Douglas Creek through a gated outlet works tunnel and an ungated spillway at the west abutment of the dam. Rob Roy Reservoir is a major recreational attraction of the Medicine Bows, offering boating, camping, and picnicking (Conner 1981:5).

Water is then diverted from small diversion dams on Douglas Creek and Horse Creek into Lake Owen by means of an eleven mile, reinforced concrete pipeline. The diversion dams can collect water on a year round basis. This pipeline discharges its water into the Lake Owen Reservoir, a natural lake enlarged to a capacity of 750 acre feet by a small earthfill dam. Lake Owen serves to regulate water as well as reduce pressure between the Douglas Creek-Lake Owen pipeline and the Lake Owen-Middle Crow Creek pipeline (Conner 1981: 5).

The next component in the system is a 26-inch pipeline 39 miles long, from Lake Owen to Middle Crow Creek. Pressure along this stretch reaches up to 625 pounds per square inch. The water flows by gravity through the pipeline, which empties into Middle Crow Creek below the Vedauwoo Picnic Ground. It is then stored in reservoirs outside the Forest (Granite Springs and Crystal Lake) owned by Cheyenne (Conner 1981:5).

In essence, as a result of this project, Cheyenne can draw out 12,000,000 gallons per day from the North Platte, and simultaneously divert the same amount back into the Platte (Wyoming State Tribune 9/21/64).

MILITARY USE OF POLE MOUNTAIN

Military involvement on Pole Mountain began in 1879 when the Secretary of War requested permission from President Hayes to establish a Wood and Timber Reservation for use by Ft. Sanders, Ft. D.A. Russell, and the Cheyenne Depot. President Hayes agreed, and Sec. 20 and 30, Township 15 North-Range 71 West became a Wood and Timber Reserve (letter from the Secretary of War to President Hayes 11/1/79: Historical File, Laramie District Office). In 1880, the Secretary of War requested and was granted an enlargement of the Wood and Timber Reserve by adding Sec. 28 and 32, Township 15 North-Range 71 West (letter from the Secretary of War to President Hayes 2/24/80 and letter from President Hayes to the Secretary of War 2/25/80, Historical File, Laramie District Office.)

On October 10, 1900, President McKinley proclaimed the creation of the Cow Creek Forest Reserve, encompassing the same lands as the present Pole Mountain Division of the Medicine Bow National Forest. On October 9, 1903, President Roosevelt transferred the Cow Creek National Forest Reserve lands to the War Department for use as a military reserve, under the provision that military use would not interfere with Forest Reserve objectives. Private land within the boundaries was condemned, purchased, and added to the Ft. D.A. Russell Target and Maneuver Reservation. Ft. D.A. Russell was located on the outskirts of Chevenne, and troops stationed there would be using the Target and Maneuver Reservation for training exercises (Bruce 1959:40).

In December of 1906, Forest Supervisor Lewis Davis was given instructions that the Ft. D.A. Russell Target and Maneuver Reservation would be jointly administered by the US Forest Service and the War Department. Davis was to administer the lands under Forest regulations and the Commanding Officer was to be in charge of land used for military purposes (camps, maneuver practice, etc.), with the understanding that Forest use did not "interfere with or take precedence over the military use of the area". This understanding gave the military the power to regard almost any action on the part of the Forest Service as "interference". The War Department was given permission to graze stock and use resources, such as water and timber, without charge. could be cut under the supervision of the Forest, and the Forest Supervisor and Commanding Officer were to consult on all land use decisions (Bruce 1959:41). The Forest Service was put in a subordinate position to the War Department, submitting to Ft. D.A. Russell applications for any sale of timber, grazing permits, or any free land use (Coughlin's Historical Notes: Medicine Bow Collection, Box 30).

In 1908, the War Department was given authority to exchange any remaining private lands within the reservation for equal areas on other public land, and homestead entries were disallowed (Bruce 1959:42).

President Taft officially abolished the Crow Creek Division of what was then called the Cheyenne National Forest on April 19, 1910, by Executive Order #1192. A forester was assigned to work under the Commanding Officer to oversee such activities as grazing, timber, and fire patrol. Ranger head-quarters were in Laramie; however, Ranger Frank Pennock reportedly spent the summer of 1910 playing polo with the officers who were not on maneuvers (Bruce 1959:42-43).

Joint administration presented many difficulties. The Forest Service encouraged the War Department to continue previous grazing policies and not to refuse the use of the range to local ranchers, with the exception of prohibiting grazing on watersheds of North Crow Creek, or any waters contributing to the water supply of Cheyenne or Ft. D.A. Russell (Bruce 1959:45-46).

All existing grazing permits were scheduled to expire on April 15, 1911. No further permits would be granted or renewed by recommendation of the War Department. Lovejoy was notified on August 1, 1910 to continue Forest supervision until the War Department was they were ready to take full charge. However, Lovejoy indicated his disgust with the War Department policy, claiming that the Forest was being misused and local users were being forced from the area. It was reasoned that since the Forest no longer had the authority to protect the permittees' rights, it would be better to relieve the Forest of responsibility in that area altogether. The War Department apparently administered the Reservation from then until 1925 (Bruce 1959:47-49).

Senator Warren of Wyoming was instrumental in acquiring the necessary funds to enlarge and maintain Ft. D.A. Russell, which has been called "a monument to pork barrel legislation". He was also reportedly responsible for the establishment of the Target and Maneuver Reservation on Pole Mountain (Hansen 1948:148). One theory maintained that Senator Warren manipulated the formation of the military reserve over a grazing dispute. Senator Warren reportedly applied to the Forest for permission to graze his sheep on the Forest Reserve. Because that rangeland was already allotted to cattle permittees, permission was denied. Therefore, Warren, as Chairman of the Committee on Military Affairs of the Senate, used his influence to have the Pole Mountain Reserve turned over to the War Department, who immediately cancelled all grazing permits (Hansen 1948:148).

In 1924, the Ft. D.A. Russell Target and Maneuver Reservation was evaluated for reentry into the National Forest system, and on June 15, 1925, all but 3,317 acres in the center of area was added to the Medicine Bow National Forest as the Pole Mountain Division by President Coolidge. The 3,317 acres was to be maintained by the War Department as the Ft. D.A. Russell Target and Maneuver Reservation, with unhampered use of the entire area for National Defense (Coughlin's Historical Notes, 2/10/53; Medicine Bow Collection, Box 30). Once again, the area was to be jointly administered by the Forest Service and the War Department. Although the military reservation was restricted to the 3,317 acres in the center of the Pole Mountain Division, a memo issued by the War Department in 1937 described the legal boundaries of the Ft. Francis E. Warren (formerly Ft. D.A. Russell) Target and Maneuver Reservation as identical to the boundaries of the Pole Mountain Division, plus some odd pieces to the south and east of the Forest (War Department

Statement 7/21/37, Historical File, Laramie District Office).

By mutual agreement between the War Department and Forest Service, The Pole Mountain District became a National Game Refuge on July 1, 1925. No hunting or fishing was allowed (Countain's Misterical Notes, 2/10/00; Medicine bow Collection, Box 30). The 3,317 acres of maneuver grounds were apparently not included in the Game Refuge (this area is still technically a refuge, but hunting and fishing are now allowed). In 1927-1928, the Kaibab deer was introduced on Pole Mountain (Armstrong 1935:23).

In 1925, Adjutant General Walter Davis, in charge of the Wyoming National Guard, worked on converting the military reserve into a permanent summer camp for the National Guard. Plans included construction of a mess hall and kitchen (to be used as a community hall), and five company kitchens (Laramie Republican-Boomerang 4/16/25).

A policy statement issued by the Forest Service in 1927 described the Pole Mountain "Working Circle" as consisting of 56,140 acres, 3,317 of which were still used by the War Department for maneuver grounds by the National Guard. The maneuver grounds were to be treated as "an interior exemption...surrounded by Forest land". There was even some question as to whether the Forest could plant trees in the area (USFS Memo 4/2/37, Historical File, Laramie District Office).

Between 1925 and 1929, the Forest tried to persuade the War Department to let them administer the excluded land, but the War Department remained reluctant. Grazing and camping were not actually prohibited on the maneuver grounds, except during actual use, but any Forest Service use of that area was strictly regulated by the War Department. The rest of the Pole Mountain Division continued to be jointly administered in theory, but the War Department waived all rights except the permission to use any part for maneuvers (USFS Memo 4/2/37, Historical File, Laramie District Office).

The area of the most intense military use included Section 32, Township 15 North-Range 71 West and the north half of Section 5, Township 14 North-Range 71 West (USFS Policy Statement 2/25/27, Historical File, Laramie District Office). Presumably, the buildings used as headquarters were located in this area. A caretaker was employed for a time to look after the buildings. He resided in Section 3, Township 14 North-Range 71 West, and because of the distance between his residence and the camp, as well as the lack of real need, the caretaker was relieved on March 1, 1928. The War Department turned over the house, barn, and other buildings used by the caretaker, as well as the warehouse near the National Guard camp, to the Forest Service. Forest Ranger, stationed in Section 24, Township 15 North-Range 72 West on the Happy Jack Road, took on the duty of checking on the camp. The Ranger's headquarters consisted of a cabin, barn, outbuildings, and a 40 acre horse pasture. These structures were constructed with the approval of the Commanding Officer. As of 1928, the Ranger carried out his duties there year round (USFS Policy Statement 1/20/28, Historical File, Laramie District Office).

The War Department would post sentinels along the roads whenever firing was planned to keep the public out of danger (USFS Policy Statement 1/10/28,

Historical File, Laramie District Office). An annual military maneuver was described as follows: the Fourth Brigade (2,500 infantrymen) marched in a two mile column from Ft. F.E. Warren (Ft. D.A. Russell became Ft. Francis E. Warren on July 1, 1930) via the Happy Jack Road, and camped the first night near Silver Crown. They reached Granite Springs Lake by July 3, bivouac there through July 4, and arrived on Pole Mountain July 5 (clipping, n.d.; Medicine Bow Collection, 1927-1934 Scrapbook).

The major part of the Target and Maneuver Reservation comprised the watershed supplying water for Cheyenne and Ft. D.A. Russell. The area was originally forested, but as a result of lumbering operations between 1870 and 1900 and ensuing forest fires, much of the area was treeless. A Forest Service memo in 1928 urged a reforestation program, involving 20,000-30,000 acres and \$200,000-\$300,000 (USFS Memo 5/24/28, Historical File, Laramie District Office). There was to be no military use of portions of the Forest during the establishment of forest plantations and for fifteen years after planting (USFS Letter 4/24/37, Historical File, Laramie District Office).

In a letter from the Regional Forester to the Chief of the Forest Service on 4/24/37, a proposal to return the Pole Mountain Division to the War Department was mentioned. The author strongly recommended against USFS withdrawal from the area, citing a "cordial relationship" with the War Department over the years. The proposal was apparently never followed through.

During the 1930's, a CCC camp was established on Pole Mountain, and was presumably headquartered at the National Guard camp on the Target and Maneuver Reservation. The enrollees worked on recreational facilities, roads, and winter sports areas. Three dams on Pole Creek were also to be constructed to improve the fishing and provide the soldiers with bathing facilities, water for their stock, and pontoon bridge practice (USFS Letter 4/24/37, Historical File, Laramie District Office).

The Pole Mountain Nursery had the capacity of 280,000 trees by 1937. Improvements consisted of a residence for the nursery man and the district ranger, an equipment building, workshop, bunkhouse, reservoir, and pipeline. Experimental planting of a total of 2112 acres had been carried out over the preceding ten years. Another 30,000 acres were to be planted to improve the watershed (USFS Letter 4/24/37, Historical File, Laramie District Office), (see Pole Mountain Nursery section under Lumbering).

The Pole Mountain Division was a popular area for recreation during the years of joint administration. Although summer residences were not encouraged because of the military use of the area, there were campgrounds, picnic grounds, winter sports areas, and the Summit Inn Resort (see Recreation). Recreational areas were serviced by the Happy Jack Road, the Pole Mountain Nursery Road, the Telephone Road, and the Vedauwoo Road. Other than the ski trails and a few short service trails, there had been no recreational trails constructed or needed as of 1937.

There are no natural lakes on the Pole Mountain Division. Other than Horse Creek, Telephone Creek, and a few other minor drainages to the west, the entire area is the watershed for Cheyenne and Ft. Francis E. Warren. Sanitation on recreation areas was very important because of this (USFS Memo

4/16/37, Historical File, Laramie District Office).

Apparently the military realized the need for another caretaker, for in 1944, Master Sergeant Ferguson was caretaker and sole military resident on the Pole Mountain Reservation. His job was to guard the installation, which now included 23 buildings, a rifle range, and other govenrment property (Wyoming State Tribune 4/12/44). Dewey Ferguson currently resides in Cheyenne (Sgt. Vogle, Fort Francis E. Warren Museum, Personal Communication 1981).

By the spring of 1959, the Pole Mountain Training Annex of Francis E. Warren Air Force Base was of no further use to the military (Letter 5/14/59). On July 10, 1959, Public Land Order #1897 abolished the Pole Mountain Training Annex, and that acreage (approximately 3,317 acres) formerly used by the military was added to the Medicine Bow National Forest (Letter 12/16/59, Historical File, Laramie District Office). All military interests in the Pole Mountain District were terminated by Public Land Order #2446 on July 20, 1961 (Multiple Use Plan, Pole Mountain 1972).

CHRONOLOGICAL HISTORY OF THE POLE MOUNTAIN DISTRICT: STATUS AND REGULATORY AGREEMENTS

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- February 4, 1879 and February 25, 1880: Executive Order established Ft. D.A.

 Russell wood and water withdrawals.
- October 10, 1900: Lands withdrawn as Crow Creek Forest Reserve by President McKinley.
- May 22, 1902: Creation of the main Medicine Bow Division of the Wyoming Medicine Bow National Forest.
- October 9, 1903: Executive Order established Ft. D.A. Russell Target and Maneuver Reservation by condemnation and purchase of interior lands.
- February 1, 1905: The Forest Service was transferred from the Department of the Interior to the Department of Agriculture.
- December 4, 1906: War Department and USFS jointly administer Ft. D.A. Russell Target and Maneuver Reservation.
- July 1, 1980: Executive Order combined Crow Creek National Forest and the Wyoming Division of the Medicine Bow National Forest to create the Cheyenne National Forest.
- April 19, 1910: Executive Order #1192 abolished the Crow Creek Division of the Cheyenne National Forest, and held it as the Ft. D.A. Russell Target and Maneuver Reservation.
- July 1, 1910: Proclamation creating the Medicine Bow National Forest from the former Cheyenne National Forest.

- May 9 and June 4, 1925: Joint rules and regulations. Retransferred, joint agreement, the administration, protection, and resource development to the Forest Service in cooperation with the War Department.
- June 5, 1925: Executive Order #4245 created the Pole Mountain District of the Medicine Bow National Forest, withholding a central portion of 3,317 (or 3,313,55) acres.
- July 1, 1925: Joint rules and regulations. Established the Pole Mountain Federal Game Refuge by joint agreement with the War Department.
- January 10, 1929: Letter of Authorization granting permission by the War Department for a 15 year tree planting program.
- July 1, 1930: Ft. D.A. Russell became Ft. Frances E. Warren.
- August 29, 1935: Letter of Authorization authorizing the Forest Service to manage all wildlife in the Pole Mountain District.
 - July 10, 1959: Public Land Order #1897 adds the 3,317 acres of former Target and Maneuver Reservation back to the Forest Service.
 - July 20, 1961: Public Land Order #2446 terminated all military interest in the Pole Mountain District.

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(adapted from: USFS Memo by S.W. Van Doran, Acting District Ranger, 12/6/56; History of the Medicine Bow National Forest, 1902-1910 by Robert K. Bruce, 1959; miscellaneous letters.)

A REVIEW

OF :

CULTURAL RESOURCE INVENTORIES WITHIN THE FOREST

A notable characteristic of early archeological surveys on the Medicine Bow National Forest is the lack of emphasis on historic cultural resources. In many cases, historic sites were not even recorded. In 1974, T.K. Larson conducted a survey of 12 timber sales, but did not record historic sites. In 1975, the Laboratory of Public Archeology (LOPA) conducted an archeological survey on the Snake River and its tributaries for the Savery-Pothook Project. Jennings and Daniels recorded historic sites, but stated that none were related to "any noted figure or major event" so that they were of "limited importance at best". They were judged ineligible for the National Register chiefly because of their age (just over 50 years) (Jennings and Daniels 1976:119).

The Office of the Wyoming State Archeologist conducted an archeological survey of portions of the Bighorn, Shoshone and Medicine Bow National Forests (Ziemens 1978). No historic sites were found on the Medicine Bow Forests projects. Their report contains one paragraph relating to historic cultural resources:

Historic sites mark activities after the arrival of white man into the area. Examples of these are military forts, trading posts, stage stations, wagon trails, etc. This area was settled late compared to the Southwest and the East and West Coasts. Therefore historic sites are not common in the area and most represent less significant activities such as homesteads, cow camps, and early mining activities. The location of most of the significant historic sites is well documented. However, a few have undoubtedly gone undetected (Ziemans 1978:103-104).

Reiss and Larson (1978) surveyed 15 project areas within the Medicine Bow National Forest and stated historic site goals which included assessments of numbers of structures, state of preservation, and observation of site patterning (Reiss and Larson 1978:2). They located 15 historic sites, all with architectural structures thought to be related to logging activities. They also noted that these sites were either in clear areas or "within a 1/4 mile wide perimeter around the clear areas." They stated that these sites were representative of others that would be found on the Forest and that they would be located in the same general setting. They also noted that the historic sites could not be evaluated for historical significance without a "comprehensive historical study of the entire forest" (Reiss and Larson 1978:25,29-30).

Chase and Arthur (LOPA 1980) conducted a cultural resources inventory of 17 project areas within the Forest. Forty-seven historic sites were recorded during the fall of 1979. Their report contained an historical overview of the region. Utilizing geological maps and information from the Wyoming State and U.S. Geological Survey reports, Chase and Arthur identified a number of mining-related sites that had not been inventoried. These and other sites developed from the literature search were listed in tabular form (Chase and Arthur 1980:40-52).

They proposed that there should be "a high historic site density that is quite visible," and that the sites should occur "in all types of terrain, at all altitudes, and they should represent all activities conducted on or near the Forest" (Chase and Arthur 1980:62). They reiterated that evaluation of historic sites was not possible "until the regional data base is better known or until a great deal of additional archival and archeological research is completed" (Chase and Arthur 1980:183).

The work of Fawcett and Francis (1981) on a number of "timber sales, controlled vegetation burns, and spring, trail or fence improvements" provides the most meaningful treatment of historic cultural resources to date, and therefore will be discussed in greater detail in the Critical Summary. In their research design, they stated: "Prehistoric hunters and gatherers utilizing the Medicine Bow National Forest were generalized broad-spectrum foragers. In contrast to the prehistoric foragers, we propose that historic populations exploited the Medicine Bow National Forest through a specialized resource use strategy, exploiting a limited number of resources very intensively" (Fawcett and Francis 1981:20-21).

Centering on three major types of historic sites: 1) mining-related, 2) lumber and tie industry-related, and 3) pastoral (sheep and cattle industry), they proposed that mining related sites would be "located in mineral rich zones"; lumber and tie related sites would be "located along major streams and within mature stands of timber"; and pastoral sites would be in areas of "abundant grass and water" (Fawcett and Francis 1981:21).

They further hypothesized that:

 Given the more specialized resource use by historic populations, historic sites should be more uniformly distributed in terms of elevation and vegetation zones than prehistoric sites.

- 2. Historic sites, due to their more specialized nature, should be located in areas of lower vegetative diversity than prehistoric sites.
- 3. Specific classes of historic sites (mines, lumber camps, pastoral sites, etc.) should be distinctive in their specific environmental parameters required for their maintenance and existence (Fawcett and Francis 1980:21).

The data gathered by Fawcett and Francis in their survey tended to prove the first hypothesis, but the second showed historic sites to be located in areas of higher vegetative diversity than prehistoric sites. However, when

broken down into the three kinds of historic sites previously mentioned, mining camps were found to be "in areas of lower vegetative diversity than prehistoric sites." Concerning the third hypothesis, Fawcett and Francis found that the two variables of elevation and dates of the beginning and end of occupation provided the only distinguishing criteria among the three types of sites. They found that mining camps dated from 1897 to 1923 while lumber camps and pastoral sites ranged from 1920 to 1950 (1981:66-77).

Other findings included: 1) pastoral settlements tend to be lower in altitude than mining camps (with lumber camps in between); 2) access to permanent water has "little effect on the distribution of the various settlement types"; 3) pastoral sites occur in sage-grassland and aspen zones; 4) mining camps are found in pine, spruce-fir, and willow/marsh zones; and 5) lumbering camps are restricted to the pine zones/lodgepole and ponderosa pines (Fawcett and Francis 1981:73-77).

This study devoted a great deal of discussion to the movements of sheepherders and their flocks and their relationship to the aspen carvings:

- 1) the number of sheep will increase during periods of higher precipitation.
- 2) the number of sheepherders should also increase under such conditions.
- 3) It is assumed that the number and distribution of sheepherders and distribution of aspen carvings is indicative of the number and distribution of sheepherders and their flocks. Mobility should increase during dry years when pasture is more limited (Fawcett and Francis 1981:77-79).

Their preliminary findings indicated that most of the sheepherding activity within the Medicine Bow National Forest occurs between June and September and that the mean elevation of the carvings increases from May through July, and then decreases through October; further, "it appears that the fluctuations in precipitation and mean annual elevation of the aspen carvings are roughly in phase," but that there is a time lag in effect. However, their results seemed to indicate that "wet periods tend to have aspen carvings that are at higher elevations. Their frequency does not appear to increase too much during wet periods" (Fawcett and Francis 1981:70-84).

Fawcett and Francis conclude that aspen carvings "provide a record of the sheepherders within the Medicine Bow National Forest that is not available in any written source" (Fawcett and Francis 1981:84).

CRITICAL SUMMARY AND MANAGEMENT RECOMMENDATIONS

the company of the co

Previously inventoried historic sites within the Medicine Bow National Forest are shown by type and quantity in the following table:

	Historic Site Type	***************************************	#
logging roads, surg	es - Tie and lumber camps, cutting e dams, loading platforms and ramps -tie flumes and chutes.		27
Mining-related site prospect holes, pla	s - Mines, mining structures, cabin cers, dredges	s and camps,	4(
the state of the s	eepherder camps with and without stals, fences, feed stations	ructures,	2
Ranches or homestea	ds where the same that when the	ing the state of t	
Bear Traps (?)			1
car rraps (.)			}
Errigation dams and	canals		1

A substantial number of sites were not identified by the archeologists as to function. Most of these sites consist of one or more log cabins. It should be noted that many early site forms were incomplete and varied widely as to information recorded. It is obvious, however, that mining, logging and pastoral sites are by far the most numerous historic sites thus far recorded on the Forest. A large number of the unidentified sites would undoubtedly fall within these categories.

A table of unrecorded sites has been compiled from the existing literature, GLO and historic maps, Forest records, informants, etc. This list appears

in the Appendix and verifies and expands the list compiled by Chase and Arthur (1980). Only those sites for which an approximate legal location could be determined have been included, and the source of information is listed. These sites have not been field-checked, and their present physical condition is unknown. This list may be used to alter existing cultural resource sensitivity map overlays.

Because of the preponderance of mining, logging, and pastoral sites within the Medicine Bow National Forest, the following discussion focuses on these types of historical cultural resources.

MINING-RELATED HISTORICAL SITES

Because all of the districts on the Medicine Bow National Forest have experienced extensive mining activity in the past (with the exception of the Pole Mountain portion of the Laramie District where mining was insignificant), mining-related sites are common. Existing Wyoming State and U.S. Geological surveys provide detailed information concerning the various mining districts, the individual mines within the districts, and their locations.

Geologic maps included in these reports depict the mineral and base metal bearing formations and the principal veins. Approximate mining district boundaries can be derived from these sources and can be used to designate areas with a high probability of containing mining related sites. Boundaries always involve a certain margin of error, and some districts were less concentrated than others. Thus, the Encampment mining district had mines diffused throughout the Sierra Madre Range, while the Gold Hill District was quite small and concentrated. Even the Encampment District, however, had within its boundaries definable areas of concentrated mining activity around Battle, Rambler and Rudefeha.

Mining district boundaries and the information included within geological reports provide a valid basis for determining high sensitivity areas for mining related sites. This is not a predictive model. Mining in the Medicine Bow National Forest is well documented, and these areas can be plotted on maps with a fair degree of accuracy. This documentation is based on the geology of the region and actual location of the mines.

This body of information, if properly researched, compiled, and utilized, will yield the principal mining related sites within the Forest; however, it is impossible to pinpoint every prospect hole and isolated mining effort. It is reasonable to assume that evidence of mining activity will increase as one approaches the boundaries of a recognized district, but the individual miner had no way of knowing where a mineralized belt began or ended except by prospecting.

The usual pattern in mining activity began by placer mining along the streams, which required only a pan and a shovel. Stream gravels were washed for signs of precious minerals. It was assumed that any mineral thus found must have eroded and washed down from the principal vein somewhere upstream and

upslope. In this manner, a new district would expand into the lode mining phase, where the vein or veins were exploited. Mining expanded from the promising stream channels to the mountain sides and ridges. Exposed and weathered veins at or near the surface were most easily worked and were traced until they dipped underground. It was then necessary to commence the next mining phase which involved extensive development. Milling might be required to break down the more complex ores, and at this point, capital investments were needed to develop a district. The individual miner either moved on or became an employee of a mining company (see Mining section for further details).

In determining the historic significance of a mining-related site, it should be remembered that, with the possible exception of the Encampment District, mining in the Medicine Bow National Forest was never highly productive compared to the great mining camps in Colorado, Montana and elsewhere in the Rocky Mountain West. Many of the so-called "rushes" were based on wishful thinking, irresponsible distortion of the facts by the media, and promotional schemes.

However, the search for precious minerals and base metals in the study area led to extensive exploitation and development of the region. Settlements sprang up overnight, capital was injected into the economy, roads were constructed, jobs created (however shortlived), and in a few cases, railroads were built. The people living through a "gold rush" had no way of knowing at the outset that their camp might not become another Leadville or Virginia City.

Mark Junge, in his 1977 National Register Nomination of the Jelm-Frank Smith Ranch Historic District (just outside the Forest boundaries), presents an interesting discussion of the historical significance of a short-lived, unsuccessful mining camp. This discussion is applicable to most of the mining camps in the Medicine Bow National Forest:

Jelm was not a large settlement, nor was it a permanent settlement. It was not a place where mining operations paid handsome dividends to miners. Nevertheless, however small its physical size, and however small the magnitude of its economical role in history, it is still a part of the development of the Rocky Mountain West. And in order to properly gauge that development, mining failures such as Jelm, as well as mining successes, should be chronicled and their proper roles defined...Jelm was a place where man expended his energy, where he schemed and worked, and where he left physical evidence of his presence...(Junge 1977: Item 8, 11-12).

Three basic criteria might be used in the evaluation and ranking of individuals mines: date of discovery, total production, and condition of the physical remains. Certainly the Rudefeha Mine had a great impact on the Encampment District in terms of production and its ramifications for the region, but the Doane-Rambler Mine was actually discovered and developed at a much earlier date. Early discoveries in a region act as catalysts for the subsequent flurry of activity, resulting in new and more important discoveries. The existing mining documentation and, the information contained

in this report should be sufficient to evaluate mining related sites in the future.

The physical remains are also an important criterion. A mining operation with intact standing structures, such as shaft houses and ore houses or machinery still in place, represents a more valuable resource than a mere prospect hole, shaft or ore dump from an architectural point of view. Little work has been done in the study of 19th and early 20th century mining architecture and the changes in mining technology. The examples are fast disappearing under the onslaught of souvenir hunters and vandals. The mining-related sites that have been derived from the literature must be field-checked to determine historic significance in regard to physical remains.

Isolated prospect holes, shafts, tunnels, and associated structures do not always surface in the available literature. Some may be researched in the county courthouse as to name and date of filing. However, the historic significance will be more difficult to determine on such a site. It may be representative of a certain period of mining technology and display a well preserved structure of architectural significance, even though it was never important enough, from an economic standpoint, to be mentioned in the geological survey reports or any history. An isolated mining site may never have been "potted". From an archeological point of view, it may be able to yield additional valuable information. Diagnostic historic artifacts may be found, in situ, which can be used not only to verify dates of occupation or use, but can tell us about the lives of the miners who lived and worked there for a time, information of the kind that court house records cannot yield.

Each site must therefore be measured on its own merits as well as compared with the existing body of information to place it in its proper historic perspective. Evaluation involves comparison with that which is already known on a local, state and regional level.

As proposed by Fawcett and Francis (1981), mining activity is directly related to the geologic character of the region. Mine and placer locations were dictated purely by the presence (or supposed presence) of minerals. The miner did not have the time for or interest in subsistence farming or ranching. He cared little about edible plant life, and his interest in water was directly related to mining, as placer mining and milling operations required large quantities. The search for and exploitation of the mineral was everything. All else was secondary.

A distinction can be made between mines and mining camps. The miner had no control over the location of the mine, but often had some latitude in locating the camp. As long as the distance did not become prohibitive, it was sometimes possible to find a somewhat more favorable location for the residential camp. A good year round water source, a south-facing exposure, a fairly level and dry building site, shelter from the prevailing wind, and access to building materials were desirable. A south-facing exposure was especially important in the mountains, as it allowed the sun to melt the snow on a site which might otherwise be under snowdrifts most of the year. However, a camp might still be established in an unfavorable location to be close to the mines.

Elevation does not appear to be a limiting factor in mining-related sites, as it is not directly related to the finding of precious metals in the Medicine Bow National Forest. In distinct contrast to the selection of logging and pastoral sites, vegetation zones are not a factor. Fawcett and Francis found that mining camps tended to be located at higher altitudes than logging and pastoral camps, and the existing documentation does not appear to disagree.

MANAGEMENT FOR MINING

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In concentrated mining areas that are easily accessible to the public, such as the Douglas Creek District and activity around Rattle, Rambler, Rudefeha and Copperton, vandalism and potting of sites is common. Public education in these areas would tend to curb the damage done by souvenir hunters who are genuinely not aware that they are impacting historic cultural resources. Strategic placement of interpretive signs explaining the mining history of the Encampment District and the importance of preserving the last remaining vestiges of that era would at least make the public think twice before they acted. It would be advantageous to increase surveillance in these sensitive areas, but it is recognized that lack of manpower and funding may preclude this option. While interpretive signs would emphasize the history of the area, it could also be made clear that disturbing these sites is a punishable offense. Bottle and arrowhead collecting are considered hobbies by much of the citizenry, and they do not realize that their acts are illegal on federal land. Road closures may also be effective in sensitive areas to cut down the volume of public use or misuse, and to make large scale looting physically more difficult. This discussion is equally applicable to logging and pastoral sites. The interpretation of specific sites and districts will be discussed in greater detail later in the report.

PASTORAL-RELATED SITES

Locating pastoral-related sites presents a much more difficult problem than locating mining-related sites. The existing body of information is less extensive and of a different character. The location of a mine can be precisely plotted, and much of the work has already been accomplished by geological surveys and county courthouse records. In general, pastoral sites have not been plotted. Some "sheep camps" and "sheep headquarters" appear on early Forest Service maps and have been compiled on the unrecorded site list. This does not account for the untold number of seasonal camps used and abandoned by a herder as he moved with his bands of sheep.

The basic grazing practices which were put into effect shortly after the creation of the Medicine Bow National Forest are discussed in detail under "Grazing". Briefly, the Forest was divided up into grazing districts or units. Permits were issued to stock operators, allowing each to graze a specified number of cattle, horses or sheep within a particular portion of the Forest. Changes in district or unit boundaries and grazing quotas occurred over a period of time, depending on the quality of the range.

Permittees also changed over the years, although many pioneer operators passed down their permits through the generations.

A complete set of grazing cards dating back to and including the first permits issued is kept in the Forest Supervisor's Office for the Medicine Bow National Forest (Laramie) for both open and closed allotments. These cards contain the name of the operator, kinds and numbers of stock grazed, the name of the allotment, and the grazing dates. Compiling this information to present a complete grazing history of the entire Forest would be a time consuming task. Furthermore, it would be necessary to have the grazing maps showing all the changes in boundaries and grazing districts and units. A few grazing maps were found in the Medicine Bow Historical Collection and elsewhere, but not enough to give a complete picture.

The value of a project of such magnitude must be weighed against the cost and the kind of information which would result. It is quite likely that all sheep and cattle camps upon which structures were built could be traced back to the original operator and given a construction date as permission from the Forest Service was required. Less permanent camps with no standing structures might be identified as belonging to a certain outfit on whose allotment it was located. However, boundary and permit changes might make this an incredibly complex or even impossible task.

With pastoral sites, one must deal with a complex body of information in some practical manner. Also, all pastoral sites which predate the Forest must be accounted for. Many of the original permittees were given allotments which roughly corresponded with the areas they had already been using, but many large operators, such as the Cosgriff Brothers, ranged sheep far and wide, and every operator was constantly competing for a limited amount of range.

Existing documentation, then, cannot be used as easily for pastoral sites as for mining-related sites. A great deal of information has been presented in this report concerning the grazing industry, so that individual pastoral sites can be placed into an existing framework. For dating purposes, one must rely on the physical remains. A sufficient number of datable historical artifacts may yield a reliable range of dates, although a great deal of work remains to be done on dating typologies, especially for more modern sites (1900+).

In the nearby Red Desert region, sheepherder camps have been utilized on a seasonal basis over a long period of time, presenting the archeologist with artifacts displaying a wide temporal range. The herder may have returned each year out of habit. Visibility may have been a major consideration when choosing a site, as one herder was responsible for up to 3000 sheep.

Even less is known about the techniques and methods of sheepherding in mountainous terrain. This type of historic cultural resource has been largely neglected in the past. The physical remains are seemingly unimpressive and the archeologist is not sufficiently informed to interprete the remains. The work begun by Fawcett and Francis (1981) concerning the movements of sheep on the Medicine Bow National Forest is therefore very important.

It is urged here that a multiple approach be taken in studying and recording pastoral sites. The information available in Forest Service files and in the Medicine Bow Collection (much of which has been presented in this report) can be used in conjunction with an analysis of the actual physical remains.

Using aspen carvings alone, Fawcett and Francis determined that most sheep-herding activity occurs on the Forest between June and September. The records yield the same information and can considerably refine those dates.

The concept of a relationship between number of sheep and sheepherders and amount of precipitation is innovative, but many more variables must be considered. A standard sized band of sheep on summer range is about 1250; a winter band consists of 2000 to 2500. One sheepherder and his dogs are usually responsible for a band (although some help might be available during the lambing season). An examination of available literature and records reveals that the same general numbers have been in effect for the past hundred years. Furthermore, manpower has been drastically affected by immigration quotas, the Taylor Grazing Act of 1934, and improving economic conditions in the countries of origin. Mexican and Peruvian herders have been gradually replacing French and Spanish Basques (Rosenberg 1981:37-38).

Other factors must also be considered when developing a research design: the fluctuation of market prices for wool and mutton, grazing fees, government regulations, predator control (or lack thereof), and lack of manpower. A thorough knowledge of the industry and Forest grazing regulations is necessary to raise meaningful research questions about pastoral sites on the Medicine Bow National Forest.

The observations of Fawcett and Francis and some of the variables they have noted, including aspen carvings, should be included in the research designs of future cultural resource surveys. Elevation and the changing vegetative environment are two basic variables which might yield positive results in predicting the presence or absence of sheepherding camps.

From Forest Service grazing reports, it is possible to discover the range types in the Medicine Bow National Forest, their frequency, and what kinds are most preferred by the different grazing animals. A compilation of two such reports (Wheeler 1913:1-3, Douglas 1912:2) reveals the following information:

- 1. Grassland Types Bunch Grasses, Grama grasses excellent forage for the early part of the grazing season when found along low elevation slopes and ridges; also provides good forage above timber-line once the snow has melted.
- 2. Meadow Type Open mountain parks along streams and near their heads; characterized by moist soil throughout most of the summer; composed of sedges, some wild timothy and red top; excellent for cattle and and horses, fair for lambs, but poor for old sheep.
- 3. Weed or Open Weed Type Found on burns and among aspens; composed of wild oats, wild bromus, blue stem and grama grass, pine grass; weeds form over 50% of the forage growth and are composed of parsnip

turnip, pea, yarrow and lupen. The weed type is described as "the ideal summer feed for sheep. More feed is produced during the entire season in this type than in any other, except the wet meadows."

- 4. Browse Willows along streams, choke cherry, serviceberry, hawthorne and oakbrush; nutritious but limited in extent.
- 5. Sagebrush Lower altitudes for early spring grazing; grasses are composed of blue stem, elk grass, bunch grasses; the snow melts first here so that it is ideal for lambing grounds; however the soil dries out quickly and stock must be moved higher by about June 30th.
- 6. Conifer Type Poor grazing; principal forage are weeds; this type is most valuable toward the end of the grazing season when "lower ranges have dried up."
- 7. Waste Range in dense timber or brush Valueless.
 - 8. Barren slide rock, ledges; valueless.

It should be possible to rank the most valuable forage types and match them with vegetation zones to develop a model to be tested by subsequent surveys. However, most allotments contain a wide range of forage types and can vary greatly in elevation. Depending on the allotment boundaries, a sheepherder would tend to move his band steadily upward as the forage ripens and the snow melts. This would indicate the presence of sheepherder camps at wide elevation ranges.

In summary, pastoral sites present a much more complex problem than mining. A detailed historical framework has been provided in this report for evaluation purposes, and an attempt has been made to explain Forest grazing procedures so that subsequent surveyors will have a basic understanding of the industry in relation to the Forest. Research questions for the future have been posited which may be implemented in some form, depending on the needs of the Forest Service and the bent of future researchers.

LUMBER-RELATED HISTORIC SITES

Anyone who has hiked extensively in the Medicine Bow National Forest realizes the abundance of logging camps and historic cutting areas. In fact, it is still possible to find rotted piles of hand hewn ties that never made it to market. The location of some of these tie and lumber camps have been determined from historic Forest maps and GLO survey maps. The existing literature, especially in the Medicine Bow Historical Collection, mentions numerous sites, which are usually referred to only in general terms and cannot be pinpointed on a map.

Since the creation of the Forest, timber sale records have been kept showing the various timber sales and their boundaries. Cutting regulations and

restrictions are also described. However, there are large gaps, and it is not known at this time whether these gaps can ever be filled. Even a complete history of timber sales and corresponding maps would not yield the location of all the historic camps and individual cabins. A company which successfully bid on a sale was given permission to construct suitable cabins within the sale boundaries in which to house the loggers and tie hacks needed for the cutting. It does not appear at this time that all of these structures can be located from the existing literature. Certainly pre-Forest logging activity is even harder to document.

We do know that the tie business represented the dominant portion of the logging industry, starting in 1867-68 and continuing thoughout most of the history of the Forest. The extensive stands of lodgepole pine were ideally suited to the making of ties. They grew straight and strong with relatively clean trunks, and reproduced quickly. Proximity to the Union Pacific Railroad provided a ready market. The water courses were favorable to the driving of ties down tributary channels to the North Platte and Ft. Steele on the west, and down to the Little and Big Laramie Rivers to Laramie on the east. The tributaries on the east side of the Sierra Madres, especially the Encampment River, were equally favorable for sending ties to the North Platte.

The dominance of the tie industry extended to 1940, when the Union Pacific no longer accepted river driven and hand hewn ties. After the 1940 drive, the era of the tie hack ended in the Medicine Bow National Forest. Ties were still cut, but were prepared by portable sawmills, and with improved transportation an increasing number of logs were hauled by truck to central large milling operations. Emphasis was transferred to producing building lumber.

There appears to be no valid criterion for separating tie hack camps from logging camps, and it is assumed that loggers and tie hacks lived and interacted in the same camps. For reasons explained above, tie drive-related sites such as surge dams and loading stations must pre-date 1940, as explained above. It should be emphasized here that mine props and logs were also stream driven, but ties dominated as is evident from the historic photos of the spring drives.

From documentation of the lumber industry on the Medicine Bow National Forest, Fawcett and Francis appear correct in postulating that lumber camps "...are largely restricted to the pine zone, which includes lodgepole and ponderosa pine" (1981:76-77). However, this encompasses a wide elevation range from 5470 to 9800 ft. Because of the historic reliance on lodgepole pine, it would appear possible to refine the model by excluding ponderosa, which tends to grow at lower elevations. The majority of historical logging-related sites should fall within areas where lodgepole pine is most abundant.

Sites related to the driving of ties, mine props, and logs, such as surge dams, loading stations and flumes will be located along the principal tributaries leading to the North Platte on the west, the Little and Big Laramie Rivers on the east, and the Medicine Bow River and Turpin Creek on the north. These tributaries include Douglas Creek, North and South French Creeks, Muddy Creek and Lake Creek (which flow into Douglas Creek), and the North and South Forks of Mill Creek. The banks and lower slopes surrounding such streams

should therefore be considered highly sensitive. Log chutes may be found where small tributaries descended rapidly in elevation and were undrivable, or on steep enbankments where they were used to deliver ties or logs to a drivable stream.

Although most historic logging-related sites should be located in the lodge-pole pine zone, timber sales are still occurring in these same areas; therefore, the possibility of impact to these sites may be greater than for mining and pastoral sites.

To help minimize such impact, the following suggestions are offered. Where an historically significant logging camp or structure is found in a proposed timber sale, a buffer zone of standing trees could be left around the site, and the sale boundary increased in a direction where no cultural resources will be impacted. Or, in a rapidly reproducing forest, trees could be cut quite close to a site if expertly dropped. Reseeding will eventually restore the site to its original appearance, and permanent damage to the integrity of the site would be minimal. In either case, the site would unfortunately be subject to "potting" during cutting operations and would be more visible to the general public for many years. Close supervision by Forest personnel at the cutting would be essential.

The Medicine Bow National Forest is rich in logging-related sites. The era of the tie hack and tie drives is certainly one of the most colorful periods in the history of the region. Furthermore, this industry was directly related to the building and maintenance of the first transcontinental railroad, an event of national historic significance and one of the major catalysts leading to the settlement of the western United States.

Logging-related sites should therefore be viewed as valuable historic assets by the Forest Service. It would be impractical for the Forest Service to embark on a massive stabilization and/or restoration program for the large number of logging-related structures that still exist. The forces of nature and public misuse are gradually destroying many such sites; fortunately there are a large number and many still survive.

However, selected sites or districts that are representative of the period and that still possess significant intact physical remains may be stabilized or protected to be interpreted to the public. Those sites close to existing roads and campgrounds would benefit most from active protection and interpretation. Their accessibility exposes them to public use and misuse, and from an archeological view they have already been compromised.

Other logging-related sites in the back country represent equally valuable archeological treasures. These sites have been less exposed to "potting" and misuse, and their glass, ceramic, and metal artifacts will far outlast their architectural features. These sites can yield historic and scientific information, and can provide material for future historic archeological research when new and better techniques have been perfected, just as certain cliff dwellings at Mesa Verde National Park and elsewhere are left unexcavated for future archeologists.

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For these kinds of sites, a policy of "benign neglect" might be most appropriate. When discovered, either through the literature or through an on-the-ground survey or by Forest personnel, they should be adequately recorded with a detailed description of their architectural features and extensively photographed. The sites should be posted by the Forest Service with signs indicating that they are valuable historic cultural resources and that vandalism and "potting" are federal offenses. They may then be considered when future projects are planned which might affect them adversely. The Forest Service can in this manner "save" a valuable historic cultural resource for future generations.

In all cases, the ideal mitigative measure for an historic site is avoidance. All other measures involve some damage to the site. The alternatives must be very carefully weighed when dealing with a non-renewable resource. If testing is conducted under an inappropriate or non-existent research design, the site may be damaged or destroyed for all time. As Ivor Noel Hume states:

The excavation of a historical site is not to be undertaken lightly...We must realize that archaeology is essentially destructive, requiring that we take the ground apart to see how it was first put together...Once something is dug up, it can never be put back exactly as it was (Noel Hume 1975:12,21).

The Forest Service has been entrusted by the public to protect its cultural resources as well as managing its forests. The protection of logging-related sites should strike a responsive chord within the Service, as these sites are inextricably bound up in the history and heritage of the Forest Service itself.

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A list of sites for the Medicine Bow National Forest that are considered to offer the best opportunities for interpretation of cultural resources for the education and enjoyment of the American public must rely on those previously inventoried. The relative interpretive values of historic properties is very difficult to gauge without on-site evaluation. emphasis will be placed on those sites which seem to have been adequately recorded. A finalized list can be compiled when a field inspection is conducted, at a time when the Forest is ready to initiate such a program.

Fawcett and Francis (1981) have suggested the possible formation of a Keystone-Douglas Creek National Register District to include T14N-R79W, Sections 1-36, and T15N-R79W, Sections 31-34. This boundary includes a concentration of mining-related sites in a relatively contiguous area. This area should be considered for public interpretation, including such individual sites as a mining dredge (48AB195) described as the "only dredge thus far recorded in the Medicine Bow National Forest", the American Copper Company Camp (48AB193) with at least 20 structures or features, and the Cuprite Mine (48AB197). In the latter case, there is some question whether the site inventoried is indeed the location of the Cuprite Mine. Historic records indicate the NW 1/4 rather the NE 1/4 of Section 11. Evidence of placer mining and dredging is plentiful along this portion of Douglas Creek, and the Keystone townsite and its restored cabins used for vacationers are impressive examples of a cross section of late 19th and early 20th century mining activity. Interpretive signs strategically placed along the roadways near these resources could describe the general history of the Douglas Creek District, as well as act as deterrents for vandalfsm and collection as explained earlier.

The Snowy Range mining site (SE/SE/NE-1/4 Sec.19-T16N-R79W), is an ideal candidate for public interpretation. Although the site does not represent a major operation, it is typical of late 19th-early 20th century mining technology and is favorably situated for interpretation. One-time and casual visitors driving across the Medicine Bow National Forest on the Snowy Range Road have little or no opportunity to experience the historical cultural resources the Forest has to offer. The Snowy Range site could represent the hundreds of mines spread throughout the range, and appropriate interpretive signs could convey some of the Medicine Bow's rich mining history. A Forest Service study conducted in 1980 determined that this site represented a public safety hazard. It was recommended that the mining facilities be completely removed, the shaft filled in, and the area reseeded (Inventory of Abandoned Mining Sites). It may be possible to stabilize the existing hoisting apparatus, fence off or cover the shaft opening and erect interpretive signs for a commensurate cash outlay. It must be remembered that the

Snowy Range site and all others mentioned in the report must be properly evaluated for historical and archeological significance before they can be altered or destroyed.

In the Sierra Madres, the Battle-Rambler-Rudefeha area represents another major concentration of mining activity. It is recognized that there is a good deal of private land in the vicinity, but interpretive signs along the main road explaining the history of the Encampment District and its specific site components would help to educate the public and protect the resources (see Critical Summary and Management Recommendations). Detailed field reconnaisance in the area might yield individual mines and structures on Forest Service land that could be included in a carefully planned "walking tour" utilizing brochures and/or interpretive signs. Historic photographs might help the public visualize the site in its "heyday".

A cluster of sites along Turpin Creek north of Turpin Reservoir (48CR1257, 48CR1261-66) comprise a district in which nearly all the phases of the tie industry are physically represented. There are several historic logging camps with standing structures, an historic wagon road, a flume and dam formerly used for driving ties, and a stacked pile of hand hewn ties. The various operations of the tie industry could easily be explained with signs around these sites which are accessible from the road to Turpin Reservoir.

A number of possible pastoral-related sites exist in the southwest portion of the Sierra Madres. The old Trail Ranger Station (S-1/2 Sec.8-T13N-R88W) and the nearby Savery counting corral (NW/SW/SE Sec.8-T13N-R88W) were used as the control points for livestock entering the Forest from the west on the Savery-Fireline stock driveway. The ranger station was seasonal and consisted of "a one room log cabin, a small barn and 40 acre pasture" (Wheeler 1913:9). These facilities were in use prior to 1913 and were still shown on the 1940 Forest Service maps. The Savery corral is still depicted on the 1961 USGS Grieve Reservoir Ouad. Sheep headquarters are numerous in the vicinity in the NW-1/4 Sec.10; the Divide Headquarters corral in the SE/SE/NE Sec.9; the Baggs Livestock Company Headquarters in the SE-1/4 Sec.15, and another sheep headquarters in the NW-1/4 Sec.1. It must be stressed that the present condition of the above mentioned resources is unknown.

To the north, the Corral Ranger Station was located at the Forest boundary (NW-1/4 Sec.12-T14N-R88W) where a counting corral was also situated, and acted as the entrance to the Deep Creek stock driveway. In 1913, there was "a good one room house, barn, cellar and well and pasturel" (Wheeler 1913:9). The Deep Creek Trail (not shown on current Forest Service maps) continued in a southeasterly direction to Copperton. These facilities appear on 1940 USFS maps, but are not depicted on 1961 USGS Guads (Tullis and Singer Peak). The old Cosgriff Sheep Headquarters (SW/NW Sec.3-T13N-R87W) became the Stratton Headquarters and ranch. This resource is located on private land, but might be interpreted using a simple narrative sign somewhere in the vicinity (possibly on FS Road 801).

The number of pastoral-related sites in this region is closely tied to the history of the Forest. It remains to carefully field check the condition of these and other resources in order to decide which can be most favorably interpreted for the public.

MEDICINE BOW NATIONAL FOREST POTENTIAL INTERPRETIVE SITES

- 1. Keystone-Douglas Creek mining district (Sec.1-T14N-R79W, Sec.31,34-T15N-R79W). This district includes: mining dredge (48AB195), American Copper company camp (48AB193), and The Cuprite Mine (48AB197).
- 2. Battle-Rambler-Rudefeha mining district (Sec.7-25-T14N-R86W, Sec.19-21, 27-30-T14N-R85W).
- 3. Snowy Range mining site (SE/SE/NE Sec.19-T16N-R79W).
- 4. Turpin Creek tie industry district (Sec.5,6,9,31,32-T17N-R80W). This district includes: 48CR1257, 48CR1261-66.
- 5. Trail Ranger Station (S-1/2 Sec.8-T13N-R88W).
- 6. Savery counting corral (NW/SW/SE Sec.8-T13N-R88W).
- 7. Baggs Livestock Company Headquarters (Sec. 15-T13N-R88W).
- 8. Corral Ranger Station (NW Sec.12-T14N-R88W).
- 9. Cosgriff Sheep Headquarters (Stratton Headquarters and ranch) (SW/NW Sec.3-T13N-R87W).
- 10. Elkhorn Creek Conical Timber Lodge (SW/NE/NE Sec.14-T12N-R80W).

HISTORIC CULTURAL RESOURCE SITE DENSITIES

According to previous surveys and literature searches, it appears that historic cultural resources greatly outnumber prehistoric cultural resources on the Medicine Bow National Forest. The three major types of historic sites: mining-related, pastoral-related and lumber-related, are all plentiful throughout the Forest.

As previously discussed, mining-related sites are well documented in the existing body of literature. In this report, mining districts and areas of concentrated mining activity have been mapped and designated by arbitrary boundary lines. These maps should be useful in formulating future management plans as mining-related sites become more numerous within these boundaries (see maps on pages 158,162,166,171 and 182). It must be recognized that isolated mining activities by individual prospectors may be found in many other areas of the Forest. A more detailed discussion of mining-related sites can be found on pages 157-185.

From the literature, it is known that pastoral-related sites are common on the Medicine Bow National Forest, especially in the Sierra Madre Range (Encampment District). However, unlike mining-related sites, their locations are not well documented except for several sheep camps and headquarters depicted on historic maps of the Forest. The Forest has been divided into grazing districts and units since shortly after its inception, and grazing was common in the region before the formation of the Medicine Bow National Forest. The most promising approach for predicting the presence or absence of pastoral-related sites involves the variables of elevation and the changing vegetative environment. However, at this time, very little significant data has been gathered from previous surveys, due to a lack of adequate research designs and possibly a lack of emphasis on pastoral sites. Therefore, designating areas of high and low sensitivity for pastoral-related sites would be premature. A more in-depth discussion of pastoral-related sites is found on pages 139-156.

Lumber-related sites may be the most valuable historic cultural resource on the Medicine Bow National Forest due to the importance of the tie industry to the region. Some of the tie camps, sawmills and logging roads have been depicted on historic maps, and other lumber-related sites have been described in the literature. However, the vast majority of sites remain unrecorded. Because of the reliance on the lodgepole pine by the tie industry, future research might be concentrated on determining the relationship of lumber-related sites to the lodgepole pine vegetative zone and elevation. Secondly, lumber-related sites should increase with proximity to drivable streams. These and other hypotheses must first be tested before meaningful information about site density can be derived. At present, it would appear that proposed

timber sales or projects within significant stands of lodgepole pine will have a high potential density of lumber-related sites. A more intensive discussion of lumber-related sites can be found on pages 109-137.

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APPENDIX I Unrecorded Potential Historic Sites on the Medicine Bow National Forest en <u>en la companya de la companya de</u> La companya de la co

APPENDIX I

UNRECORDED POTENTIAL HISTORIC SITES ON THE MEDICINE BOW NATIONAL FOREST

SITE	LOCATION	SOURCE
Recreation:	je .	
Medicine Bow Lodge	NE/NE Sec.19-T16N-R81W	Medicine Bow Collection
Echo Lodge (Roper's Place)	NE 1/4 Sec.10-T13N- R79W	Medicine Bow Collection
Brooklyn Lodge	NE 1/4 Sec.14-T16N- R79W	Medicine Bow Collection
University of Wyoming Summer Camp	SW 1/4 Sec.13, SE 1/4 Sec.14-T16N-R79W	Medicine Bow Collection
Thompson Lodge	SW/SW Sec.2-T13N-R80W	USFS Map-1930
Silver Spruce Lodge (private)	NE 1/4 Sec.30-T30N- R75W	USFS Map-1940
Sand Lake Resort	SW 1/4 Sec.9-T17N- R79W	USFS Map-1929
Lake Creek Resort	SE/SE Sec.2-T13N-R79W	USFS Map-1973
Barrett Ridge Ski Area	SE 1/4 Sec.20-T16N- R81N	Medicine Bow Collection
Happy Jack Ski Area	SW 1/4 Sec.24-T15N-	Medicine Bow Collection
Libby Creek Ski Area	R72W NE 1/4 Sec.30-T16N- R78W	USFS Map-1959
Inspiration Point (Snowy Range Ski Area)	NW 1/4 Sec.19-T16N- R78W	USFS Map-1959
Summit Ski Area	Approx. SW 1/4 Sec.26- T15N-R72W	Medicine Bow Collection
Water Projects:		
Hornet Draw Reser- voir	Sec.17-T13N-R87W	Medicine Bow Collection

SITE	LOCATION	SOURCE
	Sec.10-T14N-R88W	
Cow Creek Reservoir	SE 1/4 Sec.17-T14N- R85W	
Wiant Ditch	Sec.7, 8-T16N-R81W	USFS Files
Supply Canal (pos- sibly mining-related)	Sec.17, 18-T14N-R78W; Sec.13, 14, 15, 16, 22- T14N-R79W	USFS Map-1913
CCC Camps:	ALL THE CONTROL OF TH	
Pole Mountain CCC Camp	Approx. NE 1/4 Sec.6- T14N-R71W or NW 1/4 Sec.35-T15N-R72W	Medicine Bow Collection
Chimney Park CCC Camp 1988 1 1888 1988	NW 1/4 Sec.25-T13N- R78W	Medicine Bow Collection
Ryan Park CCC Camp	NW 1/4 Sec.27-T16N-R81W	Medicine Bow Collection
Brush Creek CCC Camp	Possibly same as Ryan Park CCC Camp	Medicine Bow Collection
Arlington CCC Camp	On either Overland or Rock Creek	Medicine Bow Collection
French Creek CCC	Unknown	Medicine Bow Collection
Camp	The second section of the second	
Esterbrook CCC Camp	Vicinity of Esterbrook townsite; exact loca- tion unknown	Medicine Bow Collection
Mullen Creek CCC Camp	SE 1/4 Sec.33-T16N- R78W	Medicine Bow Collection
Ranger and Guard Stations:	8-1 (147 - 148 - 200) 1910 - 17	A.*
Heather Creek Ranger Station	NW 1/4 Sec.14-T15N- R85W (outside Forest)	USFS Map-1919; Hayden; Wheeler 1913.
Big Creek Ranger Station	NW 1/4 Sec.32-T13N- R81W	USFS Map-1919; Hayden; Wheeler 1913.

SITE	LOCATION	SOURCE
Chimney Park Ranger Station	exact location unknown	Medicine Bow Collection
Foxpark Ranger Station	SE-1/4-Sec.21-T13N- R78W	-USFS Map-1930
Bow River Ranger Station	N 1/2 Sec.21-T18N- R80W	USFS Map-1930
Keystone Ranger Station	NE 1/4 Sec.22-T14N- R79W	USFS Map-1930
	N 1/2 Sec.20-T16N-	-
Sevenmile Ranger Station	exact location unknown	Medicine Bow Collection
Centennial Ranger Station	SE 1/4 Sec.33-T16N- R78W	USFS Map-1930
Brooklyn Lake Ranger Station	SW 1/4 Sec.11-T16N- R79W	USFS Map-1917
Jack Creek Ranger Station	NE 1/4 Sec.18-T15N- R86W	USFS Map-1930
Sandstone Ranger Station	W 1/2 Sec.10-T13N- R87W	USFS Map-1930
Pole Mountain Ranger Station	NW 1/4 Sec.35-T15N- R72W	USFS Map-1930
La Prele Ranger Station	NE 1/4 Sec.28-T29N- R75W	USFS Map-1973
Esterbrook Ranger Station	NW 1/4 Sec.10-T28N- R71W	USFS Map-1973
Trail Ranger Station	S 1/2 Sec.8-T13N-R88W	USFS Map-1930; Wheeler 1913
Rambler Ranger Station	N 1/2 Sec.35-T14N-R86W	USFS Map-1930; Wheeler 1913
Willow Park Station	NE 1/4 Sec.7-T13N-R84N	USFS Map-1930; Wheeler 1913
Transfer Park Ranger Station	NW 1/4 Sec.36-T15N- R81W	USFS Map-1930

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	LOCATION	SOURCE
Horatio Rock Ranger, Station	SZ 1/4 Sec.4-T12N- R79W	USFS Map-1930
Barrett Creek Ranger Station	Sec.1 or 2-T15N-R81W	USFS Map-1917
Lookout Ranger Station	SW 1/4 Sec.18-T16N- R79W (same as fire	USFS Map-1917
	lookout)	Togona my come
Stanley Park Ranger Station	SE 1.4 Sec.13-T18N- R80W	USFS Map-1917
Battle Mountain Ranger Station	SW 1/4 Sec.27, NW 1/4 Sec.34-T13N-R88W	USFS Map-1919; Hayden; Wheeler 1913.
Corral Ranger Station (also called Deep Creek)	NW 1/4 Sec.12-T14N- R88W	USFS Map-1919; Hayden; Wheeler 1913.
Twin Groves Ranger Station	SE 1/4 Sec.21-T16N- R87W	USFS Map-1919; Hayden; Wheeler 1913.
Victoria Ranger Station	NW 1/4 Sec.12-T12N- R86W	USFS Map-1919; Hayden; Wheeler 1913.
Hog Park Ranger Station	Sec.6-T12N-R84W	Wheeler 1913
Fire Lookouts:		tiga ya kesana ili salah ili salah
Medicine Bow Peak Lookout	NW 1/4 Sec.18-T16N- R ₀ 79W	Medicine Bow Collection USFS Maps
Lookout Lake Fire Cabin	Approx. SW 1/4 Sec.18- T16N-R79W	Medicine Bow Collection
Somber Hill Lookout	Corners of Sec.19, 20, 29, 30-T13N-R78W	Medicine Bow Collection
Jay's Roost Lookout	Center of Sec.24-T14N- R80W	Medicine Bow Collection
Barrett Ridge Look- out	NW 1/4 Sec.29-T16N- R81W	Medicine Bow Collection
Kennaday Peak Look- out	NE/NE Sec.17-T17N-R81W	Medicine Bow Collection

SITE	LOCATION	SOURCE
Blackhall Mountain Lookout	SE 1/4 Sec.2-T12N-R83W	Medicine Bow Collection
Fletcher Peak Look- out	Sec.29-T13N-R86W	Medicine Bow Collection
Esterbrook Lookout	SE 1/4 Sec.3-T28N-R71W	USFS Map-1940; Medicine Bow Collection.
Bridger Peak Look- out	N 1/2 Sec.14-T14N-R86W	Medicine Bow Collection Wheeler 1913.
Long Lake Lookout	NE 1/4 Sec.27-T18N- R80W	· · · · · · · · · · · · · · · · · · ·
Roads:		
Lodgepole Trail	See Transportation Maps	Medicine Bow Collection
Old Sherman Road	See Transportation Maps	GLO Maps
Laramie Gold-Hill Road	See Transportation Maps	Medicine Bow Collection
Windy Hill Road	See Transportation Maps	Medicine Bow Collection
Carbon-Gold Hill Road	See Transportation Maps	Medicine Bow Collection
Saratoga-Gold Hill Road	See Transportation Maps	Medicine Bow Collection GLO Maps
Keystone-Hog Park Wagon Road	See Transportation Maps	Medicine Bow Collection
Ferris-Haggerty- Encampment Aerial Tramway Construction Road	See Transportation Maps	USGS Map-1904
Stage Road to Encampment Meadows Tie Camp	See Transportation Maps	!
Ft. Fetterman-Rock Creek Stage Road	See Transportation Maps	GLO Maps
Ft. Fetterman- Medicine Bow Stage	See Transportation Maps	GLO Maps
Road	the state of the s	

SITE	LOCATION	SOURCE
Ft. Laramie-Rock Creek Stage Road	See Transportation Maps	GLO Maps
Oberg Pass	NW 1/4 Sec.11-T18N-R82W (private)	USFS Map-1940
Pastoral-Related: 1996	MCCA-MOSTHC COMPANY TO	अस्तराज्यसूर्यः वे जनकात्रस्यः स्ट
Stock Driveways:	er standard film and the standard film	าเหมานั้น พิศเตล และ
	See Sierra Madre	Ratliff 1935
Savery-Fireline Trail	Grazing Map	Ratiffi 1933
多意见于一个理解 医基础病		क्राकृतीहरू । १०४५
Deep Creek-Fireline Trail	See Sierra Madre Grazing Map	Ratliff 1935
		A DESCRIPTION
Elkhorn Driveway	See Sierra Madre Grazing Map	Ratliff 1935
Encampment-Slater	See Sierra Madre	Ratliff 1935
Driveway	Grazing Map	[1] [1] [1] [1] [1] [1] [1] [1] [1] [1]
Portions of the Hog Park Trail	See Sierra Madre Grazing Map	Ratliff 1935
Counting Corrals:	ရောင် (၁၈၈) မြောက္ချမားနောင် ၁၈၆ -	Displace S. A. F. N. G. 19
a, capplifox votes and spaint	wick for a maggaristic sector	mor light blokensers
Overland Corral	NW 1/4 Sec.35-T19N-	USFS Map-1940
Trail Ranger Station	SW 1/4 Sec.8-T13N-R88W	USFS Map-1930
Corral Ranger Station	NW 1/4 Sec.12-T14N-R88W	USFS Map-1919; Hayden
Savage Corrals	Sec.34-T17N-R82W	USFS Map-1917
Savery Corral	NW/SW/SE Sec.8-T13N- R88W	USGS Grieve Reservoir Ouad 1961.
Cedar Creek Corrals	SE 1/4 Sec.25-T17N- R82W on Cedar Creek	USFS Map-1940
Savage Headquarters	Corners Sec.10, 11, 14, 15-T17N-R82W	USFS Map-1917
Cosgriff Sheep Head- quarters	SW/NW Sec.3-T13N-R87	GLO Map, Resurvey 1922
Stratton Headquarters	Same as Cogriff Head-	USFS Map-1930
Stratton headquarters	quarters	OSFS PIAP-1930

	SITE	LOCATION	SOURCE
	Divide Headquarters Corral	E 1/2 Sec.9-T13N-R88W	USGS Grieve Reservoir Ouad 1961
	Sheep Headquarters	NW 1/4 Sec.1-T13N-R88W	USFS Map-1940
	Sheep Headquarters	NW 1/4 Sec.10-T13N-R88W	USFS Map-1940
	Sheep Headquarters (possibly private land)	N 1/2 Sec.2-T12N-R87W	USFS Map-1940
٠.	Baggs Livestock Company (private land)	TO 0 01.7	USFS Map-1930
	Howell's Ranch (private land)	NE 1/4 Sec.21-T12N- R78W	USFS Map-1913
	Stewart's Ranch (private land)	NE 1/4 Sec.17-T16N- R81W	USFS Map-1913
	Grant's Ranch	Center of Sec.12-T29N-R77W	GLO Map, 1880-1884
	Dawson Ranch (possibly private land)	SW 1/4 Sec.33-T13N- R88W	USFS Map-1930
	Logan Ranch (private land)	W 1/2 Sec.5-T13N-R87W	USFS Map-1930
•	Benson Ranch (private land)	NE/NE Sec.33-T14N- R84W	USFS Map-1930
ś	Hogan Ranch (private land)	NW 1/4 Sec.1-T13N-R84W	USFS Map-1930
	French Creek Ranch	NW 1/4 Sec.35-T15N- R81W	USFS Map-1940
	Lincoln Park Corrals	SE 1/4 Sec.5, NE 1/4 Sec.8-T16N-R81W	USFS Map-1940
	Stockman's Cabin	S 1/2 Sec.32-T17N- R78W	USFS Map-1940
	Sheep Camp (possibly private land)	S 1/2 Sec.35-T13N- R87W	USFS Map-1930

SITE	TOCATION	1 T
The Court of Walk Street (Court of Court	LOCATION	AVIII TO A TO A AND A TO A T
Sheep Camp	NW/NW Sec.2-T12N-R86W	USFS Map-1930
Sheep Camp	SE 1/4 Sec.15-T12N- R84W	USFS Map-1930
1. 海桑格里州西城市,农门市区	Bashgire or peaching on	· 有有的情况和第三人称形式
Sheep Camp (possibly		USFS Map-1930
private land)	R79W-30 11-01 38 2 0 1 1 2	sigirmi pinsi
Sheep Camp	NE/NE Sec.26-T17N- R79W	USFS Map-1930
· · · · · · · · · · · · · · · · · · ·		
Sheep Camp	SE 1/4 Sec.20-T14N-	USFS Map-1940
	ROOW	e na katang kabupatèn katang ali menangkan menangkan kebangan menangkan kebangan berangkan menangkan berangkan Pengangkan
Sheep Camp (private	NW 1/4 Sec.2-T12N-R86W	USFS Map-1940
land)		The state of the s
Character Caracter	G 1/2 G = 01 m10v mg/m	
Sheep Camp was the state of the	S 1/2 Sec.21-T13N-R84W	USFS Map-1940
Sheep Camp	S 1/2 Sec.28-T18N-R79W	USFS Map-1940
구경한(보험원) (1955 · 1		1. (我的基準)
Sheep Camp	Center of Sec.26-T17N- R79W	USFS Map-1940
Sheep Camp	SE 1/4 Sec.2-T16N-R80W	USFS Map-1940
Sheep Camp	NE 1/4 Sec.8-T15N-R79W	USFS Map-1940
Sheep Camp	SE 1/4 Sec.22-T14N-	USFS Map-1929
oneep damp	R87W	0010 Hab-1929
Company of the second		
Sheep Camp (private land)	SE 1/4 Sec.35-T13N-	USFS Map-1929
·		NA BALLINGA (ŽIGAL) EST
Sheep Camp	E 1/2 Sec.27-T14N-R86W	USFS Map-1929
Shoop Comp	C 1/2 C 21 E1/AV D701	wara w 1000
Sheep Campers in Agreem	S 1/2 Sec.21-T16N-R79W	USFS Map-1929
Cow Camp (possibly	N 1/2 Sec.14-T12N-R82W	USFS Map-1940
private land)	$+14$, $\mathrm{d}^{2}\mathrm{H}$, $\mathrm{g}^{2}\mathrm{g}$, $\mathrm{d}\mathrm{x}^{2}\mathrm{g}$, $\mathrm{d}\mathrm{x}_{2}\mathrm{g}$, $\mathrm{d}\mathrm{x}_{3}$	e company and war in the
Cow Camp (private)	SE 1/4 Sec.15-T13N-88W	USES Man-1940
Ow Camp (private)	A THE SECTION TOWN	USFS Map-1940
Lumbering-Related:		i de la companya de l
Pole Mountain Nursery	NW 1/4 Sec.35-T15N-R72W	Medicine Bow Collection
Ft. Laramie Wood	Sec.1 through 12-T24N-	GLO Maps
Reservation	R71W	t de la grande de la companya de la Companya de la companya de la compa
	·	

	SITE	LOCATION	SOURCE
	Ft. Fetterman Wood Reservation	parts of Sec.4, 5-T28N- R71W; parts of Sec.32, 33-T29N-R71W	GLO Maps
	Ft. Fred Steele Wood Reservation (1)	Sec.21, 22-T16N-R81W	GLO Maps
	Ft. Fred Steele Wood Reservation (2)	Sec.31, 32-T17N-R80W	GLO Maps
	Pole Mountain Wood Reservation	Sec.20, 28, 30, 32- T15N-R71W	GLO Maps; Medicine Bow Collection
. -	Old Government Saw- mill	Cottonwood Park, T26N-	USFS Memo
	Old Sawmill	NE/NE/NE Sec.22-T16N- R81W	GLO Maps
	Brooks Sawmill	NW 1/4 Sec.24-T13N- R79W	USFS Map-1913
	Webbers Sawmill	NW 1/4 Sec.19-T13N- R78W	USFS Map-1913
	King Mill	NW 1/4 Sec.8-T18N-R79W	USFS Map-1913
	Sawmill Park (two structures)	NW 1/4 Sec.18-T18N-R79W	USFS Map-1913
-	Webber's Mill (present site of Centennial Ranger Station)	SE/SE/SE Sec.33-T16N- R78W	GLO Map, .1870-1879
	Burned Sawmill	NE/NW Sec.14-T15N-R86W	GLO Map, 1881-1899
	Barclay's Tie Camp Headquarters	SE 1/4 Sec.22-T18N-R80W	GLO Map, 1883
	Encampment Meadows Tie Camp	Approx. S 1/2 Sec.14- T12N-R84W (along state line)	Medicine Bow Collection
	Gramm (lumber town)	NW 1/4 Sec.2-T12N-R78W	Medicine Bow Collection
	oming Timber Company e Camps:		9

SITE	LOCATION	SOURCE
Headquarters Camp	Sec.29-T15N-R80W	Medicine Bow Collection
Sourdough Camp	Sec.30-T15N-R80W, on Sourdough Creek	Medicine Bow Collection
Camp 4	Sec.30-T15N-R80W, on Headquarters Creek	Medicine Bow Collection
Hans Glad Camp	Sec.20-T15N-R80W, on Iron Creek	Medicine Bow Collection
Peterson's Tie Camp	NW 1/4 Sec.23-T17N- R81W	USFS Map-1913
Mullison's Tie Camp	SE 1/4 Sec.33, SW 1/4 Sec.34-T17N-R81W	GLO Map, 1870-1899
Transfer Creek Tie Camp	SE 1/4 Sec.35-T15N- R81W	USFS Map-1929
Tie Camp	NE 1/4 Sec.1-T13N-R80W	USFS Map-1917
Tie City	Sec.23-T15N-R72W	USFS Map-1940
Coe Cabins	SW 1/4 Sec.11-T15N- R81W	USFS Map-1913
Woodchopper's Cabins	SW 1/4 Sec.6-T18N-R79W	GLO Map, 1884
Tie Chutes,	NW 1/4 Sec.32-T15N-R78W	USFS Map-1913
Midway (Olson)	Sec.6-T13N-R84W	Medicine Bow Collection
Miscellaneous:	€	
Bridge, 80 ft log, two-span	Encampment River, between Sec.3 and 10- T12N-R84W	Medicine Bow Collection
Sheep Mountain Boundary Fence	Sheep Mountain Boundary	Medicine Bow Collection
World War II Prisoner of War Camp	NW 1/4 Sec.27-T16N-R81W	Medicine Bow Collection
Ft. D.A. Russell Target and Manuever Reservation Head- quarters	Approx.NE 1/4 Sec.6- T14N-R71W	USFS Map-1930

SITE	LOCATION	SOURCE
Morgan (townsite)	SE 1/4 Sec.34-T18N- R78W	USFS Map-1913
Trapper's Cabin	SW 1/4 Sec.31-T16N-R78W	USFS Map-1913
Old Fort	SE/SE Sec.10-T27N-R71W	GLO Maps, 1880-1884
Corduroy Bridge (Savage Run)	NW/SW Sec.36-T15N-R80W	GLO Maps, 1877-1899
Toltec (townsite) (state and private land)	SE 1/4 Sec.13-T27N-R74W	USFS Map-1940
Homer Hoffman School (private)	NE 1/4 Sec.25-T26N-R71W	USFS Map-1940
Pine Mountain School (private)	SE 1/4 Sec.20-T24N-R71W	USFS Map-1940
Plummer's Store (private)	NE 1/4 Sec.18-T16N-R81W	USFS Map-1940
Roosevelt Camp (probably Depression Era transient work camp)	N 1/2 Sec.17-T12N-R78W	USFS Map-1940
Unknown Function:		
King Cabins (two)	NW 1/4 Sec.30-T18N- R78W	USFS Map-1913
Lenhardy Cabin	SW 1/4 Sec.25-T14N- R80W	USFS Map-1913
Burke's Cabin	NW/SW Sec.23-T18N-R80W	GLO Maps, 1871-1883
Robert's Cabin	NW 1/4 Sec.10-T14N-R79W	Owen's 1885 Map
Benton's	SE 1/4 Sec.2-T13N-R79W	USFS Map-1913
Collin's	NW 1/4 Sec.16-T13N-R78W	USFS Map-1913
Smith-North Camp	SE 1/4 Sec.4-T13N-R79W	USFS Map-1913
Green's Camp	NE 1/4 sec.13-T17N-R81W	USFS Map-1913
Fay's Camp	NW 1/4 Sec.13-T17N-R81W	USFS Map-1913

SITE	LOGATION	SOURCE
Ten Mile	SE 1/4 Sec.7-T16N-R8IW	USFS Map-1913
Farrel's	Center of Sec.34-T15N- R81W	USFS Map-1913
Newell's House (private land)	NW 1/4 Sec.1, NE 1/4 Sec.2-T26N-R73W	GLO Maps, 1880-1884
Robinson's House	NW 1/4 Sec.16-T25N-R71W	GLO Maps, 1880-1884
Ankeny's House	SE 1/4 Sec.28-T25N-R71W	GLO Maps, 1880-1884
Wilson's	SW/NW Sec.33-T18N-R80W	GLO Maps, 1871-1883
W. Cunningham	N/NW Sec.17-T12N-R81W	GLO Maps, 1889
George Hildebrand's	SW/NW Sec.15-T15N-R87W	GLO Maps, 1889
Gross (private land)	NW 1/4 Sec.22-T14N-R87W	USFS Map-1930
Hog Park (structure)	W 1/2 Sec.2-T12N-R84W	USFS Map-1930
Jerry Park (structure)	NW 1/4 Sec.33-T13N- R82W	USFS Map-1930
Cabins (3), Race Horse Park	W 1/2 Sec.6-T18N-R79W	USFS Map-1917
Cabins (4)	SW 1/4 Sec.6-T18N-R79W	USFS Map-1913
Cabins (4)	SE 1/4 Sec.16-T17N-R80W	USFS Map-1913
Cabins (3)	NW 1/4 Sec.14-T17N-R80W	USFS Map-1913
Cabins (4)	SE 1/4 Sec.14-T17N-R80W	USFS Map-1913
Cabins (private land)	N 1/2 Sec.31-T26N-R72W	GLO Maps, 1880-1884
Cabin	NE 1/4 Sec.19-T14N-R78W	GLO Maps, 1871-1878
Cabin	NW/NW Sec.15-T15N-R80W	GLO Maps, 1877-1899
Cabin	SE/SE Sec.17-T15N-R80W	GLO Maps, 1877-1899
Cabin	SW/SW Sec.8-Tl2N-R81W	GLO Maps, 1877-1899
Camp	Center of Sec.13-T17N- R81W	USFS Map-1913

SITE	LOCATION	SOURCE
Mining-Related:		
Douglas Creek District:		+ ¥ € 1
Douglas Creek Consolidated Placers	From Sec.10-T13N-R80W along Douglas Creek about 8 miles to Sec.2-T13N-R79W; along Muddy Creek to section line of Sec.18-T14N-R79W for about 5 miles	Beeler 1906
Home Placers	Sec.10, 15, 21, 22, 27, 34-T14N-R79W on Douglas and Beaver Creeks	Beeler 1906
Albany Placers	North of Home Placers on Douglas Creek, Moore's Gulch, Elk Creek, Bear Creek, and Dave's Creek (mostly under Rob Roy Reser- voir)	Beeler 1906
Spring Creek Placers	Along Spring Creek, Sec.24, 25, 36-T14N- R79W	Beeler 1906
Holmes	On section line between Sec.4-T14N-R79W and Sec.33-T15N-R79W	Junge 1979
Keystone (partially private)	Center of Sec.22-T14N-R79W	Junge 1973
Keystone Lodge (possibly private land)	Probably same as above	USFS Map-1929
Albany Mine	NE 1/4 Sec.10-T14N-R79W	Currey 1965
White Swan Mine	SE 1/4 Sec.28-T14N-R79W	Currey 1965
Douglas Mine	SE 1/4 Sec.9-T14N-R79W	Currey 1965
Florence Mine	SE 1/4 Sec.22-T14N-R79W	Beeler 1906
New Rambler Mine	SW 1/4 Sec.33-T15N-R79W	McCallum and Orback 1968

SITE	LOCATION	SOURCE
Cuprite Mine	NW 1/4 Sec.11-T14N-R79W	Hausel 1980
Blanche Mine	SE 1/4 Sec.32-T15N-R79W	Hausel 1980
Independence Mine	SW 1/4 Sec.15-T14N-R79W	Currey 1965
Kansas Group	Sec.12-T13N-R79W	Osterwald 1952
Maudem Group	SW 1/4 Sec.1-T13N-R79W	Osterwald 1952
Gold Carter Mine	NE 1/4 Sec.22-T14N-R79W	Currey 1965
Mastadon Mine	Section line between Sec.23 and 24-T14N-	Currey 1965
and the ground of the section of the grown that the section of the	R79W	gang Sangkan dan Kabupatèn Banggan Kabupatèn Banggan Kabupatèn Banggan Kabupatèn Banggan Kabupatèn Banggan Kab
Lake Creek Mines	Sec.2-T13N-R79W	Currey 1965
Centennial Ridge District:	regorunts identori, ista innegisti sekat sistemik, apal	
Centennial Mine	SE 1/4 Sec.4-T15N-R78W	McCallum 1968
Utopia Mine	S/SE Sec.4, N/NE Sec.9- T15N-R78W	McCallum 1968
Free Gold Mine	SE 1/4 Sec.8-T15N-R78W	Hess 1926
Empire No.1 Mine	NW 1/4 Sec.17-T15N-R78W	Hess 1926
Cliff Mine	S/SW Sec.8-T15N-R78W	McCallum 1968
Oueen Mine	NW 1/4 Sec.16-T15N-R78W	Hess 1926
Kentucky Derby Mine	NW 1/4 Sec.8-T15N-R78W	McCallum 1968
Independence Mine	SW 1/4 Sec.8-T15N-R78W	McCallum 1968
Platinum City Mine	NE 1/4 Sec.16-T15N-R78W	McCallum 1968
Columbine Mine	SW 1/4 Sec.17-T15N-R78W	McCallum 1968
Platinum Placers	Along Middle Fork of Little Laramie River; S 1/2 Sec.8, W 1/2	Hess 1926
	Sec.18-T15N-R78W	
Hullville (camp)	l mile below Cliff Mine (near Columbine Mine)	Wiegand 1976

SITE	LOCATION	SOURCE
Platinum City	Approx. Sec.15-T15N- R78W (just outside Forest)	Laramie Leader 4/8/31
Gold Hill District:	Sec.9, 10, 15, 16-T16N- R80W	Hausel 1980
Acme Mine	N 1/2 Sec.15-T16N-R80W	Hausel 1980
Gold Hill (townsite)	SE 1/4 Sec.16, SW 1/4 Sec.15-T16N-R80W	GLO Maps, 1898
Cooper Hill District:	Sec.25, 26, 27, 34- T18N-R78W	
10-Stamp Mill	SW/NW Sec.35-T18N-R78W	Hausel 1980
Albion Mine	Approx. center of Sec. 27-T18N-R78W	Hausel 1980
Fox Group	Within Cooper Hill District	Osterwald 1952
Charlie Mine	S 1/2 Sec.27-T18N-R78W	Hausel 1980
Silver King Mine	SE 1/4 Sec.27-T18N-R78W	Hausel 1980
Emma G. Mine	NE 1/4 Sec.34-T18N-R78W	Hausel 1980
Encampment District:		
Leschen Aerial Tramway (Rudefa to Encampment)	Sec. 16, 15, 14, 13- T14N-R86W; Sec.18, 17, 16, 15, 10, 11, 12- T14N-R85W; Sec.7, 8, 9, 10, 3, 2, 1-T14N-R84W	Beeler 1906; Junge 1972
Elwood (camp)	Sec.18-T14N-R84W (out- side Forest)	Junge 1972
Cascade Mine	Sec.12-T13N-R84W	Spencer 1904
Itmay Mine	Sec.14-T13N-R85W	Spencer 1904
Verde or Hinton Mine	Sec.29, 32-T13N-R85W	Spencer 1904
Syndicate Mine	Sec.26-T15N-R87W	Spencer 1904
	to the second se	46.3

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SITE	LOCATION	SOURCE
Leighton Creek or Jack Creek Mine	Sec.5-T14N-R86W	Spencer 1904
Jesse Mine	Sec.9-T12N-R84W	Spencer 1904
Creede Mine	Sec.10-T14N-R86W	Spencer 1904
Island City Mine	Sec.10-T14N-R86W	Spencer 1904
Lucky Find Mine	Sec.10-T14N-R86W	Spencer 1904
Carbondale, Mine	Sec.18-T13N-R87W	Spencer 1904
Hidden Treasure Mine	Sec.28-T14N-R85W	Spencer 1904
Gertrude Mine	Sec.29-T14N-R85W	Spencer 1904
Portland/Hercules Mine	Sec.29-T14N-R85W	Spencer 1904
tall baseness Continental Mine	Sec.18-T14N-R85W	Spencer 1904
Sun Anchor and Sweet Claims	North face of Green Mountain; approx. Sec. 1, 2-T13N-R85W	Spencer 1904
Bachelor Mine	NW 1/4 Sec.18-T14N-R86W	Spencer 1904
Haskins Mine	SE 1/4 Sec.15-T14N-R86W	terral Months and Australia
		1,49,000,100,300,000,000,000,000,000,000
Vulcan Mine	SE 1/4 Sec.1-T14N-R86W	Spencer 1904
Rex Mine	NE 1/4 Sec.25-T14N-R86W	Spencer 1904
Great Lakes Mine	S 1/2 Sec.30-T14N-R84W	Spencer 1904
North Fork Mine	E 1/2 Sec.33-T13N-R85W	Spencer 1904
Gold Coin Claim	SW 1/4 Sec.11-T15N-R87W	Spencer 1904
Meta Mine	Sec.24 or 25-T15N-R86W	Osterwald 1952
Batchelder Mine	Sec.18-T14N-R86W	Osterwald 1952
Big Chief Group	Sec.18-T14N-R85W	Osterwald 1952
Bonita Prospect	Sec.25, 26-T15N-R85W	Osterwald 1952
Century Group	Sec.32, 33-T13N-R85W	Osterwald 1952

O.T.M.	TOCAMTON	COLDAN
SITE	LOCATION	SOURCE
Copper Rock Group	Sec.27, 28-T14N-R85W	Osterwald 1952
Iron King Prospect	Sec.15-T14N-R85W	Osterwald 1952
Lena Shields Group	Sec.12-T14N-R86W	Osterwald 1952
Mohawk Prospect	NW 1/4 Sec.20, NW 1/4 Sec.35-T14N-R85W	Osterwald 1952
Newton Group	Sec.13, 24-T14N-R85W; Sec.18, 19-T14N-R84W	Osterwald 1952
North Fork Group	Sec.13-T12N-R86W	Osterwald 1952
Octavia Prospect	West fork Savery Creek; 5 miles west of Battle	Osterwald 1952
Three Forks Group	Vicinity of Sec.11, 12, 13, 14-T12N-R86W	Osterwald 1952
Umslopagus Group	Sec.19, 30-T14N-R85W	Osterwald 1952
Laramie Peak Area:		The second secon
Esterbrook Mine	South of townsite; T28N-R71W	Spencer 1916
Three Cripples Mine	South of Esterbrook; approx. Sec.15-T28N- R71W	Spencer 1916
Maggie Murphy Group	Sec.21, 22-T28N-R71W	Spencer 1916
Big Five Mine	2500 ft NNE of the Three Cripples; Sec.10 or 15-T28N-R71W	Spencer 1916
McGhee Mine	1200 ft north of the Big Five Mine	Spencer 1916
Tenderfoot Mine	0.5 miles NNE of the McGhee Mine	Spencer 1916
Kreisley Group	Sec.2-T28N-R71W; Sec.35-T29N-R71W	Spencer 1916
Pyramid Mine	NW/NW Sec.23-T28N-R74W	Spencer 1916; USFS Map-1973

SITE	LOCATION	SOURCE
Copper King Mine	SW 1/4 Sec.12-T29N-R75W	Spencer 1916
Oriole Mine	SE 1/4 Sec.10-T29N-R75W	Spencer 1916
Brenning Claim	Near county line; T29N-	gusta selekti. Spencer 1916 posgrepi. See.
Perry Claim	Sec.33-T29N-R76W	Spencer 1916
Swede Boy Mine	Approx. Sec.21-T31N-	Spencer 1916
Chromite Mine	Approx. Sec.12-T31N- R77W	Spencer 1916
Blackjack Mine	SW 1/4 Sec.16-T16N- R79W	USFS Map-1913
"Gold Mine"	N 1/2 Sec.16-T14N-R77W (Sheep Mountain)	ນຸມປາເປັນ ຂະການປຸ່ງ ຈະເສດ Owen's 1885 Map
Colburn (mine and cabin)	Center of Sec.16-T18N-	CONTROL AND ANGEL AND
French Joe (mine and cabin)	SE 1/4 Sec.10-T18N-R79W	USFS Map-1917
Tenants (mine and cabin)	SE 1/4 Sec.3-T18N-R79W	USFS Map-1917
Mullison's Shaft	SW 1/4 Sec.34-T17N-R81W	
Mullison Park Claims:		
Bloody Spaniard	SE 1/4 Sec.3-T16N-R81W	GLO Maps, 1870-1898
Ben Hur	N/SW Sec.3-T16N-R81W	GLO Maps, 1870-1898
Cortez	NW 1/4 Sec.3-T16N-R81W	GLO Maps, 1870-1898
DeSoto	NE 1/4 Sec.4-T16N-R81W	GLO Maps, 1870-1898
Fair God	NE 1/4 Sec.4-T16N-R81N; SE 1/4 Sec.33-T17N-R81W	GLO Maps, 1870-1898
Saratoga	NW 1/4 Sec.3-T16N-R81W SW 1/4 Sec.34-T17N-R81W	GLO Maps, 1870-1898
Raven Group	Sec.15, 21, 22-T15N- R80W	Childers 1957

SITE	LOCATION	SOURCE
Silver Lake Trail Mine	SE/SW/NW Sec.2-T15N- R80W	Inventory of Abandoned Mine Sites 1980
French Creek Mine	SW/NE/SE Sec.11-T15N- R80W	Inventory of Abandoned Mine Sites 1980
Snowy Range Mine	SE/SE/NE Sec.19-T16N- R79W	Inventory of Abandoned Mine Sites 1980
Iron Creek Mine	SW/SE/SE Sec.20-T15N- R80W	Inventory of Abandoned Mine Sites 1980
Rock Creek Mine	SW/SE Sec.35-T19N-R79W; NW 1/4 Sec.2-T18N-R79W	Inventory of Abandoned Mine Sites 1980
American Mine	Center of Sec.16-T12N- R78W	USGS Quad-Medicine Bow 1906
Elk Mountain Mining and Milling Company	Sec.22, 23, 28-T19N- R82W	Osterwald 1952
Hamilton Group	Sec.36-T14N-R80W (near Devil's Gate)	Osterwald 1952
Waterloo Prospect	SE part of T16N-R80W (headquarters of French Creek)	Osterwald 1952